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Macroeconomic Adjustment and Growth

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Borrowing, Resource Transfers, and External Shocks to Developing Countries

Historical and Counterfactual

Steven B. Webb
and
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The 16 highly indebted countries received about half the net transfers to developing countries from official and commercial lenders in 1978-82 — and accounted for all the resource flows back to creditors in 1983-86.

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If developing countries follow the same paths industrialized countries have followed, saving for retirement will initially become more important as the population growth rate declines.

To calculate the potential importance of life-cycle saving (saving for retirement), Webb and Zia set up a simulation model that translates demographic projections into savings-rate projections. Modeling explicitly the behavior of each cohort of households separates the effects of changing population shares of children and retirees. These shares behave differently and have different effects on saving as the population growth rate changes.

Baseline World Bank population projections assume that by the middle of the twenty-first century, if not sooner, the net reproductive rate of women in every country will decline to 1.0, a level that will eventually lead to a stable population. As the last cohort of those born in the years of high reproductive rates reaches adulthood, the proportion of working-age population rises sharply. Then, as baby boomers retire and die off, it declines toward the steady-state level.

Webb and Zia simulated aggregate rates for life-cycle savings for Brazil, China, Korea, Mexico, Nigeria, Pakistan, and Turkey.

The savings rates increase for 6 percentage points when the last baby boomers enter the work force and begin to save after their children leave home. The effect on life-cycle saving is dramatic; the effect on total savings rates, which are often three or four times as high, is not.

Simulated life-cycle savings rates peak at an absolute 10 percent or less in all cases. The patterns in these projections seem robust with regard to assumptions about productivity growth, interest rates, and age-specific participation in the labor force.

This paper is a product of the Macroeconomic Adjustment and Growth Division, Country Economics Department. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Emily Khine, room N11-067, extension 61765 (27 pages with charts and tables)

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We have benefited from comments by Bela Balassa, Vittorio Corbo, Jaime de Melo, John Holsen, Fred Jaspersen, Miguel Kiguel, Ed Somensatto, John Underwood, and other colleagues in CECMG. Of course, any errors that remain are our own responsibility.

I. Introduction

International lending has been a double-bladed axe that cut both ways for economies struggling to develop. When borrowed resources came in, they allowed countries to increase investment without as much reduction of current consumption or simply to consume more. But the loans complicated the development process when they had to be repaid, especially if the resources were, by bad luck or bad policy, not invested in ways that provided the means for repayment.

This paper gathers some statistical evidence on the magnitude of lending and repayment and on the question of whether the repayment reduced the resources available in the 1980s for development. The evidence largely confirms commonly held beliefs, but the discussion emphasizes what seems new or controversial. Nine findings stand out:

1. Looking only at long-term, public and publicly guaranteed debt understates the volume of commercial lending to the developing countries before 1982 and the size of net transfers out to commercial creditors since 1982.

2. For many countries the stocks of short-term debt or long- term non-guaranteed debt built up rapidly before 1982 and declined sharply since then, when those types of debt were rescheduled and reclassified as long-term publicly guaranteed.

3. Most debtor countries have transferred net resources to commercial creditors since 1980, but on average the (middle-income) countries that have not had to reschedule their loans have made much smaller net transfers to creditors than the countries that have rescheduled.

4. Neither the absolute size of a country's debt nor the amount of World Bank adjustment lending has had a discernable positive effect on the net transfers of commercial credit to the countries; indeed, the correlation is weakly negative.

5. There is a significant negative correlation between the change in the resource balance and the change in domestic investment from the five years before 1982 to the four years thereafter.

6. The cost of paying unusually high real interest rates in the 1980s usually explains less than a fifth of the debt that countries have built up.

7. Terms of trade changes since 1978 (assuming the real trade flows that actually occurred) generally had dramatic effects on the incomes of developing countries. For most manufacturing exporters and many non-energy primary exporters, the effects of terms-of-trade shocks, accumulating with interest from 1979 to 1986, reduced net worth by half or more of a year's GDP.

8. The terms-of-trade effects increased the potential net worth of oil exporters by even larger amounts, however, although most of them did not take the opportunity to pay off their debt and acquire net assets in the rest of the world.

9. There is not a close correlation between the extent that a country was hurt by terms-of-trade changes and the extent to which it is today considered a problem debtor.

II. The Growth of Debt and Net Transfers of Resources:

External borrowing and repayment are the dominant items in the capital accounts of most developing countries. Table 1 shows a statistical survey of the debt buildup in the 70 countries that are included in the Report on Adjustment Lending 1 (RAL1) statistical appendix. (These include all the important developing countries except China and India.) The years 1978, 1982, and 1986 were chosen to indicate the debt situation after the first oil shock, after the second oil shock (and at the outbreak of the debt crisis), and after 4 years of attempted adjustment to the debt crisis. From 1978 to 1982 the debt expanded rapidly, almost doubling in nominal terms and growing about 30 percent in real terms. After 1982 the growth slowed, in both nominal and real terms. In the distribution of debt between categories of borrowers, the main changes were that the share of debt owed by Latin American Countries (LAC) and the Highly Indebted Countries (HICs) increased between 1978 and 1982, and then by 1986 it dropped back what it had been in 1978. Europe, Middle-East, and North Africa's (EMENA) share in the debt owed has dropped over the eight years; Asia's has risen.

Changes in the distribution of debt to commercial and official creditors reflect developments in the political economy of debt. From 1978 to 1982 the middle-income countries, especially the highly indebted countries (HICs), increased their share in the commercial credit to developing countries, but not in official credit. With credit readily obtainable from

commercial sources, some countries did not want to put up with the conditionality of official creditors, even if it could get them loans on slightly more favorable terms. In some countries, the private sector did most of the external borrowing, without explicit government guarantees. From 1982 to 1986, total debt to commercial lenders (from the RAL1 70) remained essentially constant in real terms. (Table 1 shows debt deflated with manufacturing unit value index of developed countries.) After 1982 the share of commercial credit to the HICs fell, but this was partially offset by an increase in their share of the credit from official sources. The low-income countries, which had not borrowed heavily from commercial creditors, suffered a decline in their shares of both official and commercial credit.

Commercial credit includes public and publicly guaranteed (PPG) long-term commercial credit, and also short-term and non-guaranteed long-term credit, which was mostly from commercial creditors to private borrowers. Some of the debt that started out as short-term or non-guaranteed (PNG) long-term debt had by 1986 been reclassified as long- term PPG debt in the reschedulings. The banks found that, because they had not made sure that short-term loans were put to self-liquidating uses, they had to recognize them as long-term obligations, at best. The developing countries found that, when foreign-exchange controls prevented private debtors from servicing non-guaranteed debt, the foreign creditors effectively pressured the debtor governments to assume the debt. In many cases this was the price for keeping open the nation's lines of trade credit. Since a substantial part of the long-term PPG debt in 1986 was originally lent as short-term and private non-guaranteed debt, it seems best to lump all three categories together from the start.

Table 1 also shows the debt burdens as a percent of GNP and of exports (Table 1b). During the 1978-82 period, the total debt burdens became more similar across categories. Since 1982, however, the burdens have become more different, mainly because of different growth experiences. For manufacturing exporters and EMENA countries, debt burdens have increased only moderately since 1982. Manufacturing prices have held up relatively well and volumes have grown. For HICs, for oil and non-oil primary exporters, and for Sub-Saharan Africa, debt burdens have grown much faster than the ability to pay. Many countries devalued their currency in real terms, as part of the adjustment process, which increased their debt/GDP ratio.

Net transfers between creditors and debtors offer another perspective on the evolution of the debt problem and countries' efforts to adjust. Calculating net resource transfers from debt data yields a picture of where resources are going to and coming from externally. Net transfers from creditors would differ from the (negative) resource balance by items such as increased reserves, direct foreign investments, and unrequited transfers.[1] Resource balances are considered separately later. Net transfers from a creditor would be disbursements minus repayments minus interest paid by the debtor. The estimates of net transfers in the following charts and tables are calculated from the World Debt Tables. The net transfers on commercial long-term debt (PPG and PNG) just sum the estimates of net transfers in the Debt Tables. For total commercial transfers we could not use this method, because there are no data on the net transfers for short-term debt and only incomplete

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[1] The resources balance equals exports minus imports of goods and non-factor services. It is about the same as the non-interest current account, if interest payments are the bulk of factor services.

data on the amount of short-term debt that was rescheduled or reclassified into long-term. To cover the reclassification problem, we calculate total net transfers from commercial creditors as the change in the total debt (stock of short-term plus long-term [PPG and PNG] debt) minus the interest rate (average rate of commercial long-term PPG) times the average total debt during the year. This method also has some problems, because the change of debt also reflects debt forgiveness, discounts on equity and local-currency swaps, and exchange-rate changes, none of which should count as net transfers. Exchange-rate changes are important for some years, but have tended to cancel each other out over the longer periods.[2] Debt swaps have been significant for only a few countries and only very recently. It seems more important to capture the negative transfers on short-term debt, as trade credit lines have shrunk. Total official transfers are the reported transfers on official long-term debt plus an estimate of IMF net transfers -- disbursements minus principal repayments minus an interest rate (average official long-term) times average IMF during the year.[3] Official transfers refer to loans only and thus do not include official grants. Total net transfers are the sum of total commercial

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[2] When the dollar was rising, in 1980-84, debt increases understate net flows. When the dollar fell, since early 1985, debt increases overstated net flows. The period 1978-82 straddles a trough in the dollar values; 1983-86 straddles a hump. Of course, exchange rate changes did not fully cancel out; the yen was much higher in 1986 than in 1978.

[3] The IMF has its own terminology, in which disbursement of credit is called a "purchase," and repayment is a "repurchase."

and official net transfers.[4] Table 2 shows the results of these calculations, subdivided by period, by debtor-country group, and by type of creditor.

From all creditors, the net transfers to all borrowers were strongly positive in 1978-82. In the context of OPEC oil shocks, "Debt was considered a solution rather than a problem."[5] With two exceptions, net transfers from every category of creditor to every category of debtor declined sharply after 1982. To low-income countries total net transfers via lending remained positive, but declined by over one-half. To Sub-Saharan Africa net transfers via lending remained barely positive, but one must remember that official grants were important there. For the other categories of middle-income countries the total net transfers became negative, especially for the HICs and Latin-America, which overlap considerably.[6] Counting short-term and non-guaranteed debt as part of total debt to commercial creditors makes the net transfers to them from middle-income countries more negative than only counting long-term public debt. As shares of GNP, transfers to commercial creditors in 1983-86 averaged almost 4% of GNP for upper-middle income countries and HIC's, but were lower for manufacturing exporters and lower-middle-income countries.

From official creditors, resource transfers before 1983 were much smaller than from commercial creditors, except to low-income countries. Since

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[4] If the loan were reclassified from commercial to official (e.g., because of exercising an Export-Import Bank guarantee) this transaction is counted (incorrectly) as a negative transfer.

[5] Fishlow, 1988, p. 202.

[6] See also Husain, 1988.

1983 resource transfers from official creditors have remained positive, but to every category they have fallen, except to the HIC's and Latin America, which have received more. Partly the overall decline reflects the interest burden, and for some manufacturing exporters it may reflect a positive decision to borrow less when even official loans were becoming more expensive in real terms. The decision to increase net transfers to Latin America probably reflects political decisions by creditor governments to use official lending to avert a breakdown of relations with commercial creditors.

Note that the net transfers from official creditors to middle-income debtors are far less than what commercial creditors took out. So there has been no global bail out. It was probably more common that the carrot of official lending, small as it was relative to total debt of HICs, helped keep debtors at the negotiating table with commercial creditors, who succeeded there in getting large net resource transfers.

III. Resource Transfers and Investment

Since 1980 most developing countries have had negative net resource transfers along with lower investment rates, and slower or negative output growth. Some observers argue that the primary chain of causal connections has run from debt crisis to negative transfers to curtailed investment to stagnant output (Sachs, 1986; Husain, 1988). Feedback loops only made matters worse. Did a more positive resource balance (corresponding to more negative transfer to creditors) lead to lower investment?

The simple cross-sectional correlation between the share of GDP going to investment and the share going to resource balance has the predicted

negative sign but is too weak to be significant.[7] Perhaps this is because of differences between the structure of economies and the ways of defining the statistics. To hold these constant, we compared the changes in investment share and resource- balance share from the 1979-82 period to the 1983-86 period. Figure 1 shows the results. The points are scattered around a line through the origin with a slope of negative 1.0. The one-to-one average correspondence of changes in resource transfers and investment is consistent with causality in either direction. Diminishing investment opportunities -- perhaps due to the interest rate and terms of trade shocks discussed later and the recessions accompanying the initial phases of adjustment -- would lower desired investment and at the same time reduce the resource transfers that financed it. For countries, however, the change in the financing flow exceeded or preceded the change in investment fundamentals, and it appears that credit constraints caused the reduced investment, especially in infrastructure and social investment. Changes in saving can also be deduced from Figure 1. If a country lies on the line through the origin with slope of -1.0, then its saving rate did not change. Countries below the line decreased saving by the vertical or horizontal distance from the line. For instance, Argentina reduced investment by 9 per cent of GNP but increased resource transfers by only 4 percent, implying that the share of consumption (although not the absolute value) rose by 5 percent of GNP. Korea, on the other hand, increased resource transfers by 7 percent of GNP, but took only 1 percent out of investment, implying that the other 6 percent came through more saving.

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[7] The relationship was examined for the averages of 1979-1982 and 1983-86.

IV. Capital Flight

The capital account is more than just borrowing and repaying external debt. For instance, in 1980 developing countries ran a capital account surplus of only about $68 billion, while their outstanding debt rose by $96 billion. In 1984, debt rose by about $69 billion, while the capital account surplus was only $14 billion.[8] The net inflow of direct investment, which would make the capital account more positive, was more than offset by accumulation of official reserves and, more importantly, by private purchases of assets in industrial countries, including capital flight.

Since evasion of taxes, unsustainable appreciation of the domestic currency, and exchange controls often motivate capital flight, statistics are sparse and uncertain. But the magnitudes are not trivial. Table 3 shows estimates of capital flight by two authors.[9] Argentina, Mexico, and Venezuela account for most of the capital flight from the countries investigated. For those three, capital flight accounted for one-third to two-thirds of their total debt in 1984. For most countries capital flight has at least slowed since 1984, so its share in the total debt has probably not risen much since then. Most of the capital flight occurred when governments could easily borrow foreign exchange to sustain overvalued domestic currencies. More recent capital flight, for instance from Brazil, has mostly had to go through

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[8] World Bank Debt Tables 1987-88; IMF, IFS. Saudi Arabia, Kuwait, Middle East unspecified, and South Africa were subtracted from the IFS capital account total for developing countries, because the Debt Tables do not include them.

[9] The two estimation methods in Khan and Haque 1987 give similar results.

the more arduous route of actual (if not fully reported) export surpluses. For the evolution of its debt burden, it makes little difference in the short-run whether their citizens used the foreign exchange to import consumption goods or to buy undeclared foreign assets -- capital flight. In either case the borrowed resources do not generate productive assets to help service the debt. But in the longer-term there is a big difference. If the investment climate improves at home, holders of flight capital can liquidate their foreign assets with interest and bring home the funds for domestic investment.[10] Of course, the key caveat is, if the investment climate improves at home.

Table 2 also shows the resource balance as a share of GNP for the various categories of countries. The difference, noted earlier, between net transfers from creditors and the negative resource balance of the developing country parallels the distinction between the increase of debt and the negative current account balance (plus reserve changes). For lower-income countries grants may account for much of the difference between net transfers to creditors and the resource balance. For middle-income countries, there is a discrepancy before 1982, which could reflect capital flight, but little difference since then.

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[10] If domestic investment in a market with serious distortion were the alternative use of funds that went to capital flight, then the country might be better off in the long run if funds were invested abroad in higher-yield projects. But capital flight is pernicious to the extent that its benefits only go to a privileged few and that it increases the need of governments to borrow abroad and reduces the tax base.

V. Credit Availability

The amount of its scheduled debt service that a country pays with current earnings, rather than finances, depends on the relationship of the debtor country with its commercial banks and official creditors. Let us consider three factors that might influence net resource flows from commercial creditors: past payment record, the threat of default, and World Bank adjustment loans.

When a country runs out of funds to meet its debt obligations, it typically goes through a rescheduling with its creditors, and then its future borrowing is tightly constrained. Figures 2A and B compare net transfers before and after 1982 for middle-income countries that did and did not go into arrears or require repeated reschedulings in the 1980s. (Appendix I lists the countries in each category.) From commercial creditors the countries that eventually rescheduled got higher net transfers before 1982 but have had much more negative transfers since then. Much of the theoretical analysis of sovereign debtors assumes that they are motivated to pay anything only by the prospects for positive (present value) net transfers in the future, but this could hardly explain the facts at hand (see Eaton, Stiglitz and Gersowitz, 1986 for a survey). No creditors are considering making future positive net transfers large enough to outweigh the negative net transfers of the mid 1980s. Some other motive must be dominant, perhaps the fear of trade reprisals or the high convenience value of access to trade credit and use of international banking services. From official creditors in 1978-82, the problem debtors-to-be were receiving lower net transfers. This is consistent with the hypothesis mentioned earlier that HICs preferred to borrow in the commercial market where they did not have to worry about the policy

conditionality required by official lenders. Since 1983 creditworthy and problem debtors (middle-income) have shared about equally in the net transfers from official creditors.

Another approach to net transfers to commercial creditors is to ask why some credit-constrained debtors get away with weaker efforts to repay than others. One theory takes off from Keynes's observation that a debtor owning a hundred pounds is at the mercy of its creditors, while a debtor owing a million pounds has the creditors at its mercy. Sachs and Huizinga claim that big debtors, whose debt is an important share in banks' portfolios, have used the threat of default to get more generous reschedulings than smaller debtors could obtain (1987). Figure 3 shows a more complex picture. Among the middle income debtors owing less than $50 billion, a larger absolute debt (in 1982) correlates negatively with net transfers from commercial creditors as a share of GNP, which would suggest less generous reschedulings. Excluding Brazil and Medico the correlation coefficient is negative 0.34 (and is statistically significant at 5% significance level). Maybe for mid-size debtors the banks will put forth more effort to collect than for small debtors. For the two biggest debtors, Mexico and Brazil, there does seem to be some truth to Sach's claim, because their net transfers are less negative than the mid-size debtors. Mexico and Brazil also have, however, prospects for long-term growth that are better than most developing countries; so more generous lending might be economically justified (Webb 1987).

Policy-based lending by the World Bank is supposed to have synergistic effects in encouraging more lending by other creditors. There are many reasons why one would not expect more adjustment lending by the Bank to correlate one-to-one with larger net transfers from other creditors. Still,

some positive correlation would help vindicate the argument that adjustment lending serves to attract commercial credit. Such a correlation does not show, however, in Figures 4A, B, C, D and E. Indeed, the average net transfers from creditors (not counting Adjustment Lending) to countries getting structural adjustment loans (SALs) and sectoral adjustment loans (SECALs) was less than the average transfers to countries not getting any SALs. For middle-income countries the negative relation between net transfers and having a SAL was stronger for commercial creditors than for official. Surprisingly, the negative relation between net transfers and having a SAL or SECAL was stronger for IDA countries than for Bank borrowers. Presumably there are some selection biases here. Countries which cannot get positive net flows from other creditors turn to the Bank and IDA for SALs. Countries with higher external debt and thus higher scheduled negative resource transfers may be more likely to get adjustment lending. Among countries which (needed and) got SALs, there is no clear positive or negative relationship between the amount of SAL (and SECAL) lending and transfers from the aggregate of other creditors. For official creditors there is a positive relation with a correlation coefficient of .44. With net transfers from commercial creditors to middle-income countries, however, the Bank's adjustment lending seems weakly negatively correlated (with a correlation coefficient of -.15). Overall, if the SALs and SECALs have any synergistic effects in making the recipients attractive targets for other lenders, those effects were too subtle to show up in these charts (see correlation coefficients at bottom of charts). Perhaps one needs more time to see the effects of adjustment policy.

VI. Trade Flows

The real values of exports and imports, shown as indices in Tables 4A, B and C, indicate the extent and mode of capital flows and real adjustment.* For every aggregation in Table 4A (except India), real exports increased relative to the volume of imports in the 1980s; in most cases the imports fell while exports rose. For HICs, real exports rose by almost one fifth, and imports fell by one fifth. Major countries that raised real export by well over one-half from 1980 to 1986 -- Turkey, Korea, Pakistan, Thailand, Malaysia -- have not had severe debt-servicing difficulties, and have maintained voluntary access to commercial credit. Mexico, the Philippines, and Brazil became HICs, however, despite export growth in the 15 and 40 percent range. Some commodity and oil exporters had slow growing exports, like Argentina and Cote d'Ivoire, or even saw exports decline, like Indonesia, Jamaica, Nigeria, and Zambia.

The countries that maintained strong export growth and avoided debt servicing difficulties have sustained real growth of imports, shown in Table 4C. All the HICs, on the other hand, have reduced real imports. Argentina, Nigeria and Zambia have cut them by over one-half.

A study comparing the HICs and 10 major non-HICs found that, while the two groups had nearly identical statistical profiles in 1980-82, the non-HICs had distinguished themselves with much more rapid export growth since the

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* The real values are calculated as the nominal flows divided by the MUV, which is the World Bank's index of Manufactures Unit Value -- the dollar unit value of G-5 exports of manufactures to developing countries.

debt crisis started in 1982. The rapid export growth seems to explain the continued access on the non-HICs to commercial bank credit although a few countries, like Korea, have reduced their total debt. The debt and imports of the non-HICs continued to grow rapidly. (Corbo, 1989.)

V. Counterfactual Stimulation

Rapid build-up of external debt often signals a country's need for structural adjustment. But to evaluate the success of adjustment and adjustment lending, one cannot look merely at the absolute level of a country's debt or even its ratio to GNP or exports. Since the onset of the debt crisis in 1982 every debtor country has become more indebted, even though they have taken adjustment measures, with varying degrees of success. High real interest rates and adverse movements of the terms of trade account for some of the increase in debt of the developing countries, but these effects vary widely. To estimate the effects of changing real interest rates and terms of trade, one must have some idea of what would have happened without those changes. This section reports the results of counterfactual simulations of the change in country's net worth with the same real trade flows but alternate, historically more "normal" patterns of prices and interest rates on commercial debt. The counterfactuals take into account the compounding of interest on extra borrowing to pay higher interest or finance the losses due to terms-of-trade shifts. The counterfactuals should not be viewed as general equilibrium forecasts of what would have happened with a different path of prices and interest rates.[11] Rather, they highlight the nominal effects of

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[11] See Corbo and de Melo 1987 for such an exercise.

price changes (regarding the interest rate also as a price) while holding the underlying real quantities constant.

To compare the cumulative impact of changes in real interest rates and terms of trade over the years 1979-86, we would like to have something like the present value of total lost and gained consumption opportunities. This should be the present value of changes made in current consumption plus the changes in net worth, assets usable for future consumption. To approximate this result, the calculation focuses on net worth, with no change assumed in consumption. The effects of external conditions were treated as changes in debt service paid to commercial creditors, which affected with compounding interest the country's net worth. The calculations assume, in other words, that real trade flows did not react to interest-rate and terms-of-trade changes and therefore that the entire shock was financed externally.

Real trade flows did change in response to shocks, of course, which means that there was also some domestic adjustment. We do not model that, but we can tell how it affects our interpretation of results. If investment did all the domestic adjustment -- say, by reduced imports of machinery to compensate for the loss of coffee revenues -- and if the foregone domestic investment would have returned the world interest rate, then we can still say that the external shock altered net worth one-for-one. Evidence in Figure 1 supports the interpretation that the domestic side of adjustment fell predominantly on investment.

For the part of domestic adjustment made by changing consumption, we can say that calculating the impact on net worth is equivalent to accumulating the value of foregone consumption, using the world interest rate as the consumers' discount rate. In other words, the net worth changes in the

counter factual calculation can be interpreted as the accumulation of the combined changes in foreign debt, domestic capital stock, and consumption. Of course, the composition of the response varied from country to country, and there are some systematic patterns.

Commercial long-term (PPG and PNG) and short-term debt are all assumed to carry the same interest rate as was actually paid on long-term PPG debt. For other private debt there are no data on the interest paid. If commercial debt becomes negative in the counterfactual -- the country becomes a creditor with the private financial sector -- the interest rate earned is assumed to be LIBOR. The counterfactuals assume that financing from official sources occurred independently from the debtor's situation vis à vis commercial creditors. Although some debtors received extra official loans to help with commercial debt problems, as suggested earlier, and obviously the amount of new commercial financing depended on the pre-existing stock of debt, these relationships were complex and varied widely across countries.

The counterfactual estimates are built up in several simple steps. The actual debt at the end of period t equals the debt at the end of period t-1, plus interest on that debt, minus the resource balance in period t, plus net borrowing for purposes other than financing interest payments on imports. (The last item would cover direct investment, reserve changes, and capital flight. In the World Debt Tables, it also includes exchange-rate effects.)

$$\text{Debt}_t = \text{Debt}_{t-1} + \text{Debt}_{t-1}^* \; r_{t-1} - \text{Res Bal}_t + \text{Other Net Borrowing}_t \qquad (1)$$

The counterfactuals simulate the build-up of debt with alternate assumptions about the interest rate $\underline{r}$ and trade prices, which result in a counterfactual resource balance.

$$\text{CF Debt}_t = \text{CF Debt}_{t-1} * (1 + \text{CF } r_t) - \text{CF Res Bal}_t + \text{Other Net Borrowing}_t \quad (2)$$

Since we want to use the actual Other Net Borrowing in the counterfactual, that is obtained by solving for it in equation (1) and plugging the result into equation (2). The results of the counterfactual are measured as a gain in net worth -- as the difference between the simulation of debt with the counterfactual and the simulation of debt with the actual long-term interest rate and actual resource balance. The simulated actual debt was usually very close to the actual, but the comparison of simulations seemed the most accurate way to measure the effects of the counterfactual assumptions and to exclude the effects of the method of simulation.

Interest Rate Shocks

On interest rates, the counterfactual we are trying to evaluate is that the real rates in international markets stayed around their historic average. Table 5 shows the recent history of world interest rates and inflation. The double-digit nominal interest rates, which were showing inflation in the US, were causing the prices of internationally traded goods to drop, even for industrial countries. This pushed real interest rates up to almost 20 percent. Some developing countries were paying even more. Of course, this was far above historic norms. For 1963-86, LIBOR minus the inflation of the MUV index averaged 2.5 percent per annum. Spreads and fees would make the effective rate to developing-country borrowers somewhat higher.

The counterfactual interest-rate calculation assumes that the real interest rate stayed at 4 percent, and thus that the nominal rate equalled inflation of the MUV plus 4 percent. Varying the counterfactual real rate up or down by a point does not make a dramatic difference. Four percent is above the ex post real rate that prevailed during the debt build-up, prior to 1982, but we want to highlight what the exceptionally high structure of real rates in the 1980s contributed to the debt build-up for developing countries. We want to avoid the criticism that the results are driven by an assumption that commercial banks would give away money at below-market rates in the counterfactual.

Assuming a 4 percent real interest rate since 1978 would raise the net worth of most countries by 1986, compared with actual rates. (A few countries would have been worse off in the counterfactual, because they actually did not pay much of the interest owed.) As one would expect, the countries and regions that relied most on commercial financing were hardest hit by interest rate shocks. Tables 6A, B and C show results by region and country. The 4 percent real rate on commercial credit would have made most countries worse off in the late 1970s but would have helped them in the 1980s. This result is sensitive to the price numeraire. In earlier calculations with the US GNP deflator, which only slowed its inflation rate, the net worth gains in the interest rate counterfactuals were less over the whole period. With the US GDP deflator, usually more gain showed up in the terms of trade counterfactual. On the other hand, with the industrial-country trade prices as numeraire, more gains showed up with the interest rate counterfactual and

less in the terms of trade counterfactual.[12] This happened because the industrial trade prices dropped sharply in the early 1980s, pushing actual real rates to 20 percent or more.

Another counterfactual scenario, in which all countries who paid their interest do better, starts with the actual debt at the end of 1980 and assumes the constant 4 percent real rate from 1981 through 1986. We can think of this as the soft-landing counterfactual -- Paul Volcker stops inflation but restarts money growth in time to keep real interest rates from going up high as they did. The right-hand parts of Tables 6A, B and C show that by 1986 the accumulated impact high interest rates since 1980 had lowered net worth of HICs and LAC countries by about 15%. For other groups the impact was smaller. We can also evaluate this gain by asking how much lower would their debt be if countries had not borrowed to pay higher interest rates associated with the hard landing. Venezuela, Ecuador, Yugoslavia, and Mexico were hardest hit; real rates above 4% in the 1980s accounted to over 30 percent of their debt by 1986. Other major Latin debtors would have had 20-30 percent less debt with the soft landing.

Anecdotal evidence suggests that if real interest rates had not sunk so abnormally low in the late seventies countries would not have borrowed as heavily, but modelling prudence in primary borrowing as a function of the current real interest rate lies beyond the scope of the paper. It might be difficult to construct a plausible model of rational decision making that would replicate the borrowing patterns of the 1970s and early 1980s.

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[12] These trade prices are the average of the dollar unit value of exports and dollar unit value of imports for industrial countries, as reported in the IMF, IFS.

Figures 5A, B, C, and D show the change of investment and resource balance (1983-86 compared to 1979-82) compared with the networth gain in the interest-rate counterfactual (plus means real interest rates in 1979-86 were higher than 1969-78). As the correlation coefficients at the bottom of the charts show, there are no significant correlations for middle or low-income countries.

Terms of Trade Shocks

Table 7 shows terms of trade relative to the base period 1969-78, which is 1.00. The typical manufacturing exporter started with terms of trade in 1978 at or below the average of the previous decade; terms of trade then worsened, because of oil price movement, with some recovery in 1985-86.[13] Most oil exporters had a reciprocal and more dramatic experience, with terms of trade peaking in 1980-82, then falling.[14] Primary exporters (all others) had a mixed experience with terms of trade since 1978, which was generally more negative than positive.

The second set of counterfactual scenarios focuses on the impact of changes in the debtor country's terms of trade. The counterfactual scenario assumes that the country's export and import prices moved with the MUV (manufactured unit value) index, at the same ratio as in 1969-78, but that the volume of exports and imports followed their actual paths. Thus the counterfactual trade flows incorporate the effects on real trade flows of the

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[13] Tunisia is an exception, because it also exports oil.

[14] Egypt and especially Cameroon had the misfortune to get their exports of oil booming when its price was coming down.

changes in incomes, real exchange rates, trade taxes and subsidies, and other policies that actually occurred. The formulas for the counterfactual values (in current dollars) of exports of goods and non-factor services are:

$$\text{CF Exports}_t \ (\$) = \frac{\text{Exports}_t \ (\text{lcu})}{p_t^{\text{exports, (lcu)}} * e_{1980}}$$

$$* \ \frac{1}{10} \sum_{i=1969}^{1978} \frac{p_i^{\text{exports (lcu)}}}{\text{MUV}_i * e_i / e_{1980}} * \text{MUV}_t$$

where e is the exchange rate. LCU means local currency unit. The first term is the real value of exports in 1980 dollars. The second term is the average price of exports relative to the unit-value index of manufactured imports.[15] The product of the first two terms is the counterfactual value of exports in 1980 dollars, discussed earlier and shown in Table 4b. The final term reflates the value up to current dollars, which is necessary to make it comparable with debt data. Counterfactual imports are calculated in the same way.

The improvement in the resource balance (exports minus imports of goods and non-factor services) that would have taken place each year if 1969-1978 terms of trade had continued is presented in Tables 8A and B. It is the resource balance in the counterfactual scenario minus the actual resource balance. A positive CF Gain shows how much greater country's resource balance would have been if 1969-1978 relative prices had continued, and therefore how much its balance worsened as a result of the terms-of-trade changes that

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[15] The 1980 exchange rate appears again in order to index the exchange rate to 1980, like the other prices in the summation.

actually occurred. A negative CF Gain means that the country (typically an oil exporter) would have had a lower or more negative resource balance with 1969-1978 relative prices and that it benefited from the terms-of-trade that actually prevailed.

The CF Networth Gains in Tables 9A, and 9B are positive for majority of the developing countries, which were hurt by the second oil shock in 1979 and have only in the late 1980s faced terms of trade again that are as favorable as in the decade leading up to 1978. Many countries gained, however, from the post 1978 terms of trade. Indeed, the total of their gains was larger than the losses by the majority. Clearly, the export composition is decisive. The decline in non-oil primary product prices importantly contributed to the deterioration of the terms of trade of many developing countries. Copper exporters especially suffered from terms-of-trade changes, relative to the counterfactual, and oil exporters especially benefitted. Table 9B shows the counterfactual gains of individual countries, grouped by export category.

Chile, Brazil, Jamaica, Kenya, Malawi, Madagascar, Philippines, Zaire and Zambia -- countries with problematic levels of debt -- would have had net worth higher by 25 percent or more of GNP (1986) if the 1969-1978 terms of trade had continued. In all these countries, except Zaire and Jamaica, the investment shares declined from 1979-82 to 1983-86 by at least 4 percent of GNP and as much as 12 percent. (See Figure 1.) Resource transfers to foreigners rose about the same amount as investment declined. In other words, there was substantial domestic adjustment in these countries, and most of it took place on the investment side. Consumption stagnated or declined only proportionally with GNP.

In other countries that have not become problem debtors -- Korea, Hungary, Pakistan, Portugal, Thailand, and Turkey -- terms of trade changes can also account for net worth being lower by over 25 percent of GNP. In these countries, however the investment shares of GNP declined by less than 3 percent from 1977-82 to 1983-86 or even rose slightly, as in the case of Turkey. Strong growth has continued through the 1980s, partly as a cause and partly as an effect of sustained investment shares. Korea was the most highly indebted of these countries in 1982, relative to GNP, but the strong increase of its saving effort and especially its rapid export growth convinced commercial creditors to keep open the lines of credit, which are now being paid off. Turkey and Hungary started the decade with relatively closed economies and low debt to GDP ratio, and their reforms to open up trade made them attractive borrowers on international markets. Hungary has become a problem debtor. Turkey and Pakistan have also had a lot of official lending.

In the counterfactual scenarios, several of the countries become net creditors to the international commercial financial sector. This does not, of course, imply that we think Turkey and Kenya would now be big net creditors if the 1978 terms of trade had continued. With more favorable terms of trade, the countries might have borrowed less and what they borrowed could have financed greater real inflows of resources for investment.

The oil exporters, such as Mexico, and Venezuela, Nigeria, and Indonesia, benefitted greatly from the path of relative prices since 1978, but they became problem debtors anyway. So did a few non-oil exporters, such as Argentina. If they had saved the windfall gains from the second oil shock, they would have quickly become net creditors and would have benefited from the high real interest rates of the 1980s. When the terms of trade improved for

oil exporters, they adjusted mainly by increasing domestic investment in the oil sector. There was negative adjustment externally, as the high oil prices improved the access of oil exporters to commercial financing. (Here is where Indonesia and Colombia, not to mention Saudi Arabia and Kuwait, differ from the oil exporters that became problem debtors.)

It seems that some oil importers and their creditors treated the post-1978 terms-of-trade changes as temporary and advisable to finance. This was only partially true and evidently less true than was assumed for the countries that have gotten into debt difficulties. Even the most rational bankers and finance ministers could make such mistakes in forecasting prices. But it was not rationally consistent to lend heavily at the same time to oil-exporting countries that were benefiting from the relative price changes in 1979-82, as if these changes were permanent.

There does not seem to be any clear correlation between terms-of-trade shocks and the changes of resource balance or of investment from the 1978-82 to 1983-86. Figures 6A, B, C, and D show the scatter plots for middle and low-income countries and the correlation coefficients which range from 0.00 to 0.21 indicating little or no relationship.

We have also looked at the combined impact on net worth of terms-of-trade and interest-rate shocks (Tables 10A, B, and C). The results reflect the same general trends as in each of the separate counterfactual simulations reported in tables 6A and 9A. Counter-factual networth gains are positive for most of the developing countries. Groups of countries that gained from the combination of terms of trade and interest-rate shock are the oil exporters, Africa (including Nigeria), and Asia (excluding India).

VII. Conclusions

Terms of trade shocks have had massive effects on demand for and usage of international financing. It is rational to finance some negative terms of trade shocks, partially offsetting the temporary ones and perhaps showing some impacts of the permanent ones. The counterpart, however, to financing negative shocks is for the international finance community to require countries with positive terms of trade shocks to borrow less or to repay. If Mexico and Venezuela had been reducing their debt ratios after 1979, Mexico would not have started the crisis in 1982. And commercial banks would have had the more leeway to maintain a longer term perspective with other debtors.

For middle-income countries, net transfers to and from commercial creditors dwarf the resource transfers from official creditors. Thus, until 1982 many big debtors could ignore official conditionality without serious financial consequences. Since 1983, resource transfers from official lenders to HICs have increased and have effectively recycled to pay net transfers out to commercial creditors, rather than to finance the investment necessary to complement reformed policies. At least for the middle-income countries, it seems that official adjustment lending can meet its objectives only if coordinated with commercial lending.

External shocks have seriously hurt some economies and have helped others. But the strength and direction of the shocks do not explain which middle-income countries now have difficulties servicing their commercial debt. One cannot argue from the evidence here that the HICs and their commercial creditors deserve a bailout because they were especially hard hit by external circumstances beyond their control.

Lower-income countries rely more on official financing (and grants) as external sources of resources for investment. Since 1983 these countries have seen net transfers from official creditors (not counting grants) fall, although often their financing needs have grown and their policies improved. Furthermore, investment may be more sensitive to the resource balance in low income countries than in middle income countries. A less developed country has a less efficient domestic financial structure and weaker links from its own private sector to international capital markets. Good investment projects are unlikely to get financing unless there is official lending. One could argue, therefore, that increased official lending would have a more favorable impact on the resource balance and domestic investment for lower income countries than for middle-income countries with high commercial debts.

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TABLE 1A

Debt Ratios in Key Years for RAL1 Countries

RAL1 Nominal Debt ($m):	1978	1982	1986
Total Debt	$335,676	$646,948	$846,189
- Commercial LT (PPG)	$117,112	$229,526	$381,293
- Commercial LT & ST & PNG	$234,895	$476,408	$548,707
- Official & IMF	$100,780	$170,539	$297,532
RAL1 Real Debt - 1980 dollars ($M)			
Total Debt	$416,988	$652,823	$746,199
- Commercial LT (PPG)	$145,481	$231,611	$336,237
- Commercial LT & ST & PNG	$291,795	$480,735	$483,868
- Official & IMF	$125,193	$172,088	$262,374

	Share of Total RAL1 Debt From All Creditors			Total Debt as Percent of GNP		
	1978	1982	1986	1978	1982	1986
Total RAL1	100%	100%	100%	33%	45%	61%
Low Income	11%	9%	10%	40%	49%	65%
Middle Income	89%	91%	90%	33%	45%	60%
Highly Indebted	57%	60%	57%	31%	45%	63%
Manufacturing Exporters	42%	40%	40%	29%	42%	51%
Primary Goods Exporters	26%	28%	29%	38%	58%	75%
Oil Exporters	32%	32%	31%	35%	42%	65%
LAC	47%	51%	47%	34%	49%	63%
Asia	18%	19%	21%	33%	44%	60%
EMENA	24%	20%	21%	36%	45%	55%
SSAF	10%	10%	11%	26%	36%	70%

	Share of Commercial & ST & PNG Debt To RAL1 Commercial & ST & PNG Debt			Commercial LT & ST & PNG Debt as Percent of GNP		
	1978	1982	1986	1978	1982	1986
Total RAL1	100%	100%	100%	23%	33%	39%
Low Income	5%	3%	2%	12%	12%	10%
Middle Income	95%	97%	98%	24%	35%	43%
Highly Indebted	67%	70%	66%	26%	39%	47%
Manufacturing Exporters	43%	40%	41%	21%	31%	34%
Primary Goods Exporters	22%	25%	24%	23%	38%	40%
Oil Exporters	35%	35%	35%	27%	34%	48%
LAC	57%	60%	56%	29%	42%	49%
Asia	16%	18%	20%	20%	30%	37%
EMENA	19%	15%	18%	20%	26%	30%
SSAF	8%	7%	6%	14%	17%	25%

	Share of Official Debt & IMF Credit to RAL1 Official & IMF Credit			Official Debt & IMF Credit as Percent of GNP		
	1978	1982	1986	1978	1982	1986
Total RAL1	100%	100%	100%	10%	12%	21%
Low Income	26%	27%	24%	27%	37%	54%
Middle Income	74%	73%	76%	8%	10%	18%
Highly Indebted	32%	32%	40%	5%	6%	16%
Manufacturing Exporters	39%	40%	39%	8%	11%	17%
Primary Goods Exporters	34%	36%	38%	15%	20%	35%
Oil Exporters	27%	23%	23%	9%	8%	17%
LAC	25%	24%	30%	5%	6%	14%
Asia	24%	24%	23%	13%	14%	23%
EMENA	35%	33%	27%	16%	20%	24%
SSAF	16%	19%	20%	12%	18%	45%

TABLE 1B
Debt Ratios in Key Years

	Total Debt As Percent of Exports		
	1978	1982	1986
Low Income	260%	333%	426%
Middle Income	183%	219%	284%
Highly Indebted	222%	287%	389%
Manufacturing Exporters	201%	224%	239%
Primary Goods Exporters	170%	271%	343%
Oil Exporters	191%	200%	352%
LAC	257%	319%	432%
Asia	128%	156%	187%
EMENA	200%	181%	241%
SSAF	126%	205%	343%

TABLE 2

Net Transfers From Creditors to Developing Countries

	(million dollars per year)		(percent of GNP)		(percent of GNP) Negative of Resource Balance	
	All Creditors		All Creditors			
	1978-82	1983-86	1978-82	1983-86	1978-82	1983-86
Low-Income	$4,675	$2,064	4.2%	1.7%	10.0%	8.7%
Middle Income	$28,384	($26,782)	2.4%	-2.2%	2.7%	-1.6%
Oil Exporters	$9,178	($11,202)	2.1%	-2.5%	0.6%	-3.0%
Manufacturing Exporters	$11,565	($10,053)	2.0%	-1.7%	4.8%	0.2%
Primary Goods Exporters	$12,697	($3,202)	4.4%	-1.0%	4.5%	1.1%
Highly Indebted	$16,826	($25,989)	2.1%	-3.4%	2.0%	-3.7%
LAC	$13,194	($21,872)	2.1%	-3.6%	1.3%	-4.5%
ASIA	$8,346	($1,987)	3.4%	-0.7%	2.7%	0.4%
EMENA	$6,406	($1,384)	2.4%	-0.5%	7.9%	5.3%
SSAF	$5,133	$532	3.0%	0.3%	4.4%	1.4%
	Official and IMF		Official and IMF			
	1978-82	1983-86	1978-82	1983-86		
Low-Income	$4,283	$3,012	3.8%	2.4%		
Middle Income	$8,389	$4,989	0.7%	0.4%		
Oil Exporters	$2,377	$1,798	0.5%	0.4%		
Manufacturing Exporters	$4,947	$926	0.9%	0.2%		
Primary Goods Exporters	$5,325	$5,246	1.9%	1.7%		
Highly Indebted	$2,921	$3,334	0.4%	0.4%		
LAC	$1,847	$3,645	0.3%	0.6%		
ASIA	$3,335	$1,578	1.4%	0.5%		
EMENA	$4,068	$339	1.5%	0.1%		
SSAF	$3,421	$2,404	2.0%	1.5%		
	Commercial Creditors		Commercial Creditors			
	Long-Term (PPG+PNG) & Short-Term		Long-Term (PPG+PNG) & Short-Term			
	1978-82	1983-86	1978-82	1983-86		
Low-Income	$391	($948)	0.3%	-0.9%		
Middle Income	$19,995	($31,771)	1.7%	-2.6%		
Oil Exporters	$6,801	($13,000)	1.5%	-2.8%		
Manufacturing Exporters	$6,618	($10,979)	1.1%	-1.9%		
Primary Goods Exporters	$7,372	($8,447)	2.6%	-2.7%		
Highly Indebted	$13,905	($29,322)	1.7%	-3.9%		
LAC	$11,346	($25,517)	1.8%	-4.2%		
ASIA	$5,010	($3,565)	2.9%	-1.2%		
EMENA	$2,339	($1,724)	0.9%	-0.6%		
SSAF	$1,712	($1,872)	1.0%	-1.2%		
	Commercial Long-Term Creditors (PPG+PNG)		Commercial Long-Term Creditors (PPG+PNG)			
	1978-82	1983-86	1978-82	1983-86		
Low-Income	$753	($425)	0.7%	-0.3%		
Middle Income	$14,209	($22,527)	1.2%	-1.8%		

TABLE 3
CAPITAL FLIGHT
1974-84
($ billion)

Country	Gross External Debt 1984	Accumulated Value of Flight Capital up through 1984 Estimates of: Dooley	Cuddington
Argentina	$46.8	$31.0	$15.8
Brazil	105.2	11.6	0.4
Chile	20.1	0.2	-2.0
Korea, Rep. of	43.2	9.0	
Mexico	96.4	42.8	38.8
Peru	13.1	3.0	1.3
Phillipines	24.6	4.8	1.4
Venezuela	36.2	28.0	13.7
Total			69.3

Sources: World Debt Tables 1987-88;
Dooley 1986;
Cuddington 1986.

Table 4a
Trade Volume Indices

1980 = 1.00

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Exports Volume Index									
Africa	0.82	1.02	1.00	0.69	0.64	0.62	0.65	0.69	0.65
Asia	0.89	0.94	1.00	1.00	1.02	1.11	1.21	1.20	1.44
India	0.87	0.92	1.00	1.02	1.02	1.08	1.19	1.15	1.29
EMENA	0.91	0.98	1.00	1.03	1.07	1.14	1.23	1.30	1.34
LAC	0.90	0.97	1.00	1.05	1.05	1.10	1.21	1.24	1.20
Low Income	0.92	0.91	1.00	0.99	0.99	1.01	1.01	0.99	1.00
Middle Income	0.89	0.98	1.00	0.97	0.98	1.04	1.13	1.17	1.22
Oil Exporters	0.91	1.03	1.00	0.84	0.84	0.88	0.92	0.92	0.98
Manufacturers	0.85	0.91	1.00	1.12	1.14	1.25	1.41	1.48	1.55
Primary	0.90	0.96	1.00	0.99	1.01	1.00	1.07	1.10	1.12
HICs	0.87	0.98	1.00	0.94	0.92	0.96	1.05	1.08	1.07
Imports Volume Index									
Africa	1.00	0.86	1.00	1.06	0.95	0.80	0.74	0.69	0.58
Asia	0.84	0.96	1.00	1.09	1.11	1.22	1.18	1.14	1.26
India	1.02	1.07	1.00	1.04	1.03	1.16	1.15	1.27	1.30
EMENA	0.93	0.99	1.00	1.00	0.99	1.01	1.06	1.05	1.06
LAC	0.82	0.90	1.00	1.01	0.84	0.62	0.66	0.65	0.66
Low Income	0.85	0.87	1.00	0.93	0.90	0.86	0.86	0.87	0.81
Middle Income	0.88	0.94	1.00	1.05	0.97	0.90	0.91	0.88	0.90
Oil Exporters	0.90	0.88	1.00	1.14	1.01	0.83	0.80	0.78	0.71
Manufacturers	0.92	1.01	1.00	0.98	0.96	0.98	1.01	1.00	1.11
Primary	0.79	0.86	1.00	0.99	0.90	0.84	0.86	0.81	0.79
HICs	0.88	0.92	1.00	1.02	0.87	0.69	0.67	0.65	0.65

Note: Asia Excludes India and China

TABLE 4B
Export Volume Index

	1978	1979	1980	1981	1982	1983	1984	1985	1986
exports volindex									
Turkey	1.06	0.96	1.00	1.85	2.59	2.95	3.53	3.97	3.91
Burundi	1.40	1.56	1.00	1.75	1.89	1.59	1.94	2.16	2.10
Korea	0.92	0.91	1.00	1.15	1.23	1.41	1.56	1.59	2.01
Pakistan	0.74	0.84	1.00	1.13	1.05	1.39	1.33	1.33	1.82
Thailand	0.85	0.94	1.00	1.13	1.24	1.20	1.42	1.52	1.73
Malaysia	0.82	0.97	1.00	0.99	1.10	1.23	1.40	1.41	1.66
Portugal	0.74	0.94	1.00	0.98	1.04	1.21	1.38	1.54	1.64
Mauritius	0.95	0.98	1.00	0.93	1.03	1.04	1.09	1.22	1.60
Mauritania	0.83	0.95	1.00	1.23	1.13	1.47	1.37	1.51	1.59
Mexico	0.84	0.94	1.00	1.06	1.21	1.35	1.49	1.45	1.52
Cameroon	0.67	0.80	1.00	1.22	1.17	1.40	1.56	1.65	1.51
Sri Lanka	0.85	0.97	1.00	1.10	1.15	1.13	1.27	1.40	1.40
Bangladesh	0.98	0.97	1.00	1.15	1.24	1.29	1.30	1.19	1.40
Ecuador	0.98	1.02	1.00	1.05	1.00	1.02	1.15	1.32	1.38
Uruguay	0.91	0.97	1.00	1.06	0.95	1.10	1.10	1.16	1.33
Philippines	0.83	0.89	1.00	1.01	1.00	1.09	1.18	1.09	1.33
India	0.87	0.92	1.00	1.02	1.02	1.08	1.19	1.15	1.29
Brazil	0.75	0.82	1.00	1.21	1.10	1.26	1.54	1.64	1.29
Jordan	0.67	0.86	1.00	1.17	1.13	1.19	1.27	1.37	1.29
Papua New Guinea	1.01	1.00	1.00	1.05	1.04	1.05	1.05	1.22	1.29
Zaire	0.98	0.82	1.00	0.87	0.95	1.05	1.09	1.11	1.28
Hungary	0.89	0.99	1.00	1.05	1.09	1.16	1.24	1.31	1.28
Colombia	0.87	0.87	1.00	0.90	0.92	0.81	0.91	0.99	1.25
Mali	0.72	0.80	1.00	0.95	0.95	1.05	1.12	1.19	1.24
Morocco	0.96	0.96	1.00	1.00	1.05	1.14	1.17	1.22	1.24
Chile	0.77	0.87	1.00	0.91	0.95	0.96	1.02	1.10	1.20
Egypt	0.90	0.87	1.00	0.90	0.99	1.05	1.10	1.10	1.17
Senegal	0.93	1.05	1.00	1.09	1.14	1.25	1.16	1.02	1.16
Kenya	0.99	0.95	1.00	0.96	0.95	0.97	0.99	1.05	1.15
Togo	0.99	0.68	1.00	1.27	1.25	1.07	1.09	1.10	1.15
Paraguay	0.93	1.66	1.00	1.03	1.14	0.82	0.90	1.07	1.09
Tunisia	0.82	1.00	1.00	1.03	0.96	0.97	1.00	1.03	1.09
Algeria	1.07	1.15	1.00	0.94	0.94	0.97	1.00	1.02	1.07
Dominican Republ	0.99	1.22	1.00	1.06	0.89	1.00	1.04	1.05	1.07
Panama	0.70	0.70	1.00	0.97	1.05	1.04	0.97	1.04	1.06
Argentina	1.00	1.01	1.00	1.11	1.05	1.02	1.07	1.20	1.06
Ivory Coast	0.87	0.89	1.00	1.07	1.08	1.00	1.10	1.09	1.05
Venezuela	1.10	1.15	1.00	0.97	0.99	0.99	0.99	0.93	1.03
Costa Rica	1.01	1.05	1.00	1.16	1.04	1.04	1.14	1.07	1.01
Yugoslavia	0.91	0.93	1.00	0.95	0.90	0.84	0.90	0.95	0.92
Peru	0.98	1.10	1.00	0.97	1.03	0.93	1.01	1.05	0.91
Benin	0.66	0.90	1.00	1.09	1.30	1.04	1.07	1.04	0.91
Ethiopia	0.86	0.85	1.00	0.99	0.95	1.03	1.20	0.96	0.90
Malawi	0.68	0.75	1.00	0.82	0.74	0.76	1.00	0.96	0.89
Jamaica	0.99	1.02	1.00	1.04	1.02	0.98	1.00	0.85	0.88
Indonesia	0.93	0.95	1.00	0.82	0.75	0.78	0.79	0.72	0.83

TABLE 4B (con't.)

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Central Afr. Rep	0.81	0.83	1.00	1.04	0.83	0.85	0.86	0.89	0.78
Sierra Leone	0.88	0.75	1.00	0.95	0.81	0.65	0.69	0.72	0.76
Zambia	1.16	1.03	1.00	0.87	1.01	0.91	0.85	0.80	0.74
Guyana	1.08	0.97	1.00	0.94	0.72	0.67	0.75	0.77	0.72
Rwanda	0.79	1.07	1.00	1.01	1.03	0.78	0.65	0.77	0.71
Tanzania	0.97	0.99	1.00	1.19	0.87	0.79	0.68	0.76	0.69
Madagascar	0.94	1.02	1.00	0.74	0.68	0.60	0.63	0.66	0.68
El Salvador	0.86	1.17	1.00	0.85	0.75	0.83	0.79	0.82	0.67
Guinea Bissau	0.81	0.81	1.00	0.72	0.64	0.59	0.81	0.59	0.65
Sudan	0.73	0.59	1.00	0.85	0.61	0.78	1.12	0.58	0.63
Niger	1.23	0.94	1.00	0.98	0.76	0.80	0.73	0.66	0.63
Guatemala	0.86	0.95	1.00	0.86	0.78	0.70	0.68	0.70	0.60
Haiti	0.54	0.60	1.00	0.58	0.71	0.64	0.68	0.64	0.58
Nigeria	0.74	1.10	1.00	0.45	0.36	0.34	0.35	0.43	0.42
Burkina Faso	0.88	0.95	1.00	1.13	0.95	0.85	0.89	0.93	
Burma	0.59	0.90	1.00	1.00	1.00	1.11			
Honduras	0.89	1.05	1.00	1.01	0.90	0.96	0.99	1.05	
Ghana	1.18	1.16	1.00	0.91	1.05	0.57	0.62	0.66	
Somalia	1.07	0.90	1.00	0.90	1.20	0.97	0.55	0.76	
Chad	1.18	1.11	1.00	0.90	0.88	0.77	0.73	0.76	
Guinea	0.87	0.89	1.00	0.92	0.99	1.01	1.12	1.06	

TABLE 4C
Imports Volume Index

	1978	1979	1980	1981	1982	1983	1984	1985	1986
imports volindex									
Turkey	1.05	0.98	1.00	1.15	1.24	1.45	1.85	2.00	2.23
Ethiopia	0.88	0.85	1.00	1.07	1.19	1.25	1.37	1.36	1.33
Korea	0.95	1.06	1.00	1.04	1.07	1.18	1.30	1.28	1.
Rwanda	0.80	0.85	1.00	0.98	1.20	1.19	1.31	1.19	1.
Guinea Bissau	1.02	1.04	1.00	0.93	1.29	1.24	1.44	1.48	1.
Jordan	0.80	1.06	1.00	1.19	1.27	1.31	1.30	1.32	1.
Mauritius	1.10	1.10	1.00	0.89	0.80	0.82	0.90	0.99	1.
Mauritania	1.06	0.99	1.00	1.23	1.47	1.43	1.35	1.36	1.
India	1.02	1.07	1.00	1.04	1.03	1.16	1.15	1.27	1.
Sri Lanka	0.71	0.84	1.00	0.93	1.07	1.11	1.12	1.25	1.
Mali	0.85	0.91	1.00	0.96	0.95	1.08	1.17	1.35	1.
Indonesia	0.82	0.91	1.00	1.34	1.36	1.43	1.11	1.14	1.
Malaysia	0.69	0.83	1.00	1.06	1.20	1.31	1.39	1.26	1.
Burundi	0.98	1.16	1.00	0.94	1.16	1.27	1.37	1.22	1.
Portugal	0.81	0.90	1.00	1.06	1.12	1.02	0.98	1.01	1.
Thailand	0.84	1.01	1.00	1.00	0.85	1.08	1.11	1.07	1.
Pakistan	0.74	0.96	1.00	0.82	0.80	0.91	0.98	1.03	1.
Hungary	1.06	1.01	1.00	1.02	0.98	0.99	1.00	1.07	1.
Togo	1.32	1.12	1.00	1.15	1.10	0.87	0.85	0.93	1.
Paraguay	0.63	0.68	1.00	0.99	0.93	0.64	0.76	0.76	1.07
Bangladesh	0.77	0.75	1.00	0.96	0.94	0.92	1.02	1.21	1.05
Morocco	1.07	1.11	1.00	1.02	1.05	0.93	0.97	0.97	1.04
Colombia	0.85	0.84	1.00	1.08	1.26	1.14	1.11	1.08	1.03
Senegal	0.93	0.93	1.00	1.15	1.10	1.14	1.04	0.97	1.02
Tunisia	0.83	0.96	1.00	1.13	1.14	1.11	1.18	1.02	1.00
Cameroon	0.81	0.90	1.00	1.15	1.04	0.99	1.08	0.75	1.00
Tanzania	0.73	0.59	1.00	0.93	0.79	0.61	0.68	0.77	0.97
Panama	0.83	0.85	1.00	1.00	1.01	0.91	0.98	0.99	0.95
Papua New Guine	0.85	0.91	1.00	1.00	0.99	0.98	0.97	0.93	0.93
Jamaica	1.09	1.00	1.00	1.06	1.08	1.03	0.98	0.90	0.91
Costa Rica	1.01	1.04	1.00	0.76	0.60	0.70	0.78	0.84	0.91
Philippines	0.83	0.97	1.00	0.97	1.01	1.12	0.94	0.72	0.90
Central Afr. Re	0.84	0.79	1.00	0.86	0.81	0.79	0.82	0.85	0.88
Algeria	1.05	0.97	1.00	1.11	1.12	1.12	1.14	1.07	0.84
El Salvador	1.39	1.30	1.00	0.89	0.77	0.76	0.81	0.83	0.83
Niger	0.84	0.94	1.00	1.03	1.05	1.01	0.85	0.98	0.79
Dominican Repub	0.72	0.85	1.00	0.90	0.77	0.75	0.69	0.71	0.79
Ecuador	0.91	0.91	1.00	0.91	0.97	0.73	0.71	0.76	0.77
Egypt	0.76	0.88	1.00	0.87	0.88	1.01	1.04	0.91	0.76
Uruguay	0.76	0.93	1.00	1.01	0.87	0.70	0.59	0.60	0.76
Zaire	0.78	0.79	1.00	0.89	0.80	0.76	0.73	0.74	0.74
Sudan	0.78	0.64	1.00	1.18	1.29	1.13	1.22	0.82	0.72
Venezuela	1.24	1.07	1.00	1.01	1.09	0.55	0.68	0.71	0.72
Yugoslavia	0.98	1.10	1.00	0.87	0.75	0.69	0.68	0.68	0.72
Chile	0.69	0.84	1.00	1.16	0.74	0.63	0.73	0.65	0.71
Kenya	1.12	0.91	1.00	0.79	0.66	0.54	0.64	0.69	0.70

TABLE 4C
Imports Volume Index

	1978	1979	1980	1981	1982	1983	1984	1985	19
imports volindex									
Turkey	1.05	0.98	1.00	1.15	1.24	1.45	1.85	2.00	2.
Ethiopia	0.88	0.85	1.00	1.07	1.19	1.25	1.37	1.36	1.
Korea	0.95	1.06	1.00	1.04	1.07	1.18	1.30	1.28	1.
Rwanda	0.80	0.85	1.00	0.98	1.20	1.19	1.31	1.19	1.
Guinea Bissau	1.02	1.04	1.00	0.93	1.29	1.24	1.44	1.48	1.
Jordan	0.80	1.06	1.00	1.19	1.27	1.31	1.30	1.32	1.39
Mauritius	1.10	1.10	1.00	0.89	0.80	0.82	0.90	0.99	1.38
Mauritania	1.06	0.99	1.00	1.23	1.47	1.43	1.35	1.36	1.33
India	1.02	1.07	1.00	1.04	1.03	1.16	1.15	1.27	1.30
Sri Lanka	0.71	0.84	1.00	0.93	1.07	1.11	1.12	1.25	1.28
Mali	0.85	0.91	1.00	0.96	0.95	1.08	1.17	1.35	1.29
Indonesia	0.82	0.91	1.00	1. 4	1.36	1.43	1.11	1.14	1.26
Malaysia	0.69	0.83	1.00	1.06	1.20	1.31	1.39	1.26	1.22
Burundi	0.98	1.16	1.00	0.94	1.16	1.27	1.37	1.22	1.22
Portugal	0.81	0.90	1.00	1.06	1.12	1.02	0.98	1.01	1.13
Thailand	0.84	1.01	1.00	1.00	0.85	1.08	1.11	1.07	1.13
Pakistan	0.74	0.96	1.00	0.82	0.80	0.91	0.98	1.03	1.12
Hungary	1.06	1.01	1.00	1.02	0.98	0.99	1.00	1.07	1.10
Togo	1.32	1.12	1.00	1.15	1.10	0.87	0.85	0.93	1.09
Paraguay	0.63	0.68	1.00	0.99	0.93	0.64	0.76	0.76	1.07
Bangladesh	0.77	0.75	1.00	0.96	0.94	0.92	1.02	1.21	1.05
Morocco	1.07	1.11	1.00	1.02	1.05	0.93	0.97	0.97	1.04
Colombia	0.85	0.84	1.00	1.08	1.26	1.14	1.11	1.08	1.03
Senegal	0.93	0.93	1.00	1.15	1.10	1.14	1.04	0.97	1.02
Tunisia	0.83	0.96	1.00	1.13	1.14	1.11	1.18	1.02	1.00
Cameroon	0.81	0.90	1.00	1.15	1.04	0.99	1.08	0.75	1.00
Tanzania	0.73	0.59	1.00	0.93	0.79	0.61	0.68	0.77	0.97
Panama	0.83	0.85	1.00	1.00	1.01	0.91	0.98	0.99	0.95
Papua New Guine	0.85	0.91	1.00	1.00	0.99	0.98	0.97	0.93	0.93
Jamaica	1.09	1.00	1.00	1.06	1.08	1.03	0.98	0.90	0.91
Costa Rica	1.01	1.04	1.00	0.76	0.60	0.70	0.78	0.84	0.91
Philippines	0.83	0.97	1.00	0.97	1.01	1.12	0.94	0.72	0.90
Central Afr. Re	0.84	0.79	1.00	0.86	0.81	0.79	0.82	0.85	0.88
Algeria	1.05	0.97	1.00	1.11	1.12	1.12	1.14	1.07	0.84
El Salvador	1.39	1.30	1.00	0.89	0.77	0.76	0.81	0.83	0.83
Niger	0.84	0.94	1.00	1.03	1.05	1.01	0.85	0.98	0.78
Dominican Repub	0.72	0.85	1.00	0.90	0.77	0.75	0.69	0.71	0.78
Ecuador	0.91	0.91	1.00	0.91	0.97	0.73	0.71	0.76	0.77
Egypt	0.76	0.88	1.00	0.87	0.88	1.01	1.04	0.91	0.76
Uruguay	0.76	0.93	1.00	1.01	0.87	0.70	0.59	0.60	0.78
Zaire	0.78	0.79	1.00	0.89	0.80	0.76	0.73	0.74	0.74
Sudan	0.78	0.64	1.00	1.18	1.29	1.13	1.22	0.82	0.72
Venezuela	1.24	1.07	1.00	1.01	1.09	0.55	0.68	0.71	0.72
Yugoslavia	0.98	1.10	1.00	0.87	0.75	0.69	0.68	0.68	0.7
Chile	0.69	0.84	1.00	1.16	0.74	0.63	0.73	0.65	0.71
Kenya	1.12	0.91	1.00	0.79	0.66	0.54	0.64	0.60	0.7

TABLE 5
WORLD INTEREST RATES AND PRICES

	1978	1979	1980	1981	1982	1983	1984	1985	1986
LIBOR 6 mo.	9.2%	12.2%	14.0%	16.7%	13.6%	9.9%	11.3%	8.6%	6.9%
Inflation Manufacturing Unit Value	15.7%	12.3%	9.9%	1.0%	-2.0%	-2.0%	-2.1%	1.1%	17.7%
LIBOR real Manufacturing Unit Value	-6.5%	-0.2%	4.1%	15.7%	15.6%	12.0%	13.4%	7.6%	-10.9%
Inflation US	7.4%	8.8%	9.1%	9.6%	6.5%	3.8%	4.1%	3.3%	2.6%
LIBOR real US	1.8%	3.4%	4.9%	7.1%	7.1%	6.1%	7.2%	5.3%	4.3%
Inflation Trade Prices	11.3%	17.3%	17.6%	-3.1%	-4.5%	-4.1%	-2.6%	-1.0%	9.1%
LIBOR real Trade Prices	-2.1%	-5.2%	-3.5%	19.8%	18.1%	14.0%	13.9%	9.7%	-2.3%

Sources: IMF, IFS.

TABLE 6A

Gains of Debtors with Counterfactual Interest Rates
(four percent above inflation of manufacturing unit value)

Interest Rate	1982	1986	Interest Rate	1986
CF Networth gain	($ million)		CFB1 Networth gain	
Africa	$338	$1,503	Africa	$5,078
Asia	$5,608	$16,796	Asia	$21,477
India	$177	$589	India	$797
EMENA	$5,613	$15,235	EMENA	$10,493
LAC	$36,851	$92,799	LAC	$99,686
Low Income	($1,673)	($3,056)	Low Income	$217
Middle Income	$50,083	$129,389	Middle Income	$136,517
Non Oil Exporting	$28,924	$71,385	Non Oil Exporting	$74,591
Oil Exporters	$21,159	$58,004	Oil Exporters	$61,926
Manufacturers	$19,952	$45,623	Manufacturers	$45,380
Primary	$7,320	$22,706	Primary	$29,428
HICs	$40,957	$103,379	HICs	$113,409
SAL Countries	$40,876	$105,351	SAL Countries	$110,192
Non SAL Countries	$7,534	$20,782	Non SAL Countries	$26,542
CF Networth gain GDPshare	(share of GDP)		CFB1 Networth gain GDPshare	
Africa	0.2%	1.2%	Africa	3.9%
Asia	1.9%	5.5%	Asia	7.0%
India	0.1%	0.3%	India	0.3%
EMENA	1.9%	4.5%	EMENA	3.1%
LAC	5.2%	14.1%	LAC	15.2%
Low Income	-1.4%	-2.4%	Low Income	0.2%
Middle Income	3.7%	9.9%	Middle Income	10.5%
Non Oil Exporting	3.4%	8.1%	Non Oil Exporting	8.4%
Oil Exporters	4.1%	13.8%	Oil Exporters	14.7%
Manufacturers	3.1%	6.7%	Manufacturers	6.6%
Primary	2.4%	7.0%	Primary	9.1%
HICs	4.6%	13.0%	HICs	14.3%
SAL Countries	3.4%	9.3%	SAL Countries	9.7%
Non SAL Countries	2.7%	6.9%	Non SAL Countries	8.8%
CF Networth gain DebtShare	(share of debt)		CFB1 Networth gain DebtShare	
Africa	0.6%	1.6%	Africa	5.6%
Asia	4.5%	9.5%	Asia	12.1%
India	0.7%	1.4%	India	1.9%
EMENA	4.3%	8.6%	EMENA	5.9%
LAC	11.4%	23.8%	LAC	25.5%
Low Income	-2.8%	-3.6%	Low Income	0.3%
Middle Income	8.6%	17.2%	Middle Income	18.1%
Non Oil Exporting	7.7%	14.5%	Non Oil Exporting	15.2%
Oil Exporters	10.2%	22.2%	Oil Exporters	23.7%
Manufacturers	7.7%	13.4%	Manufacturers	13.3%
Primary	4.2%	9.7%	Primary	12.5%
HICs	10.6%	21.8%	HICs	23.9%
SAL Countries	8.1%	15.9%	SAL Countries	16.6%
Non SAL Countries	5.6%	12.1%	Non SAL Countries	15.4%
	(counterfactual since 1978)			(since 1981)

Note: Asia Excludes India and China

TABLE 6B
Increase of Networth (reduction of Debt) From A Constant
Real Interest Rate of Four Percent: Share of GDP

Interest Rate CF Networth gain GDPshare	1982 Counterfactual since 1978	1986 Counterfactual since 1978	Interest Rate CF81 Networth gain GDPshare	1986 Counterfactual since 1981
Chile	8.3%	37.0%	Chile	36.1%
Ecuador	8.7%	27.0%	Ecuador	27.7%
Mexico	7.6%	26.2%	Mexico	25.8%
Panama	12.0%	25.5%	Panama	26.5%
Venezuela	6.3%	24.0%	Venezuela	25.0%
Costa Rica	-1.0%	21.4%	Costa Rica	23.4%
Jamaica	1.4%	13.9%	Jamaica	17.2%
Argentina	5.7%	13.3%	Argentina	14.6%
Ivory Coast	4.8%	12.8%	Ivory Coast	17.5%
Dominican Republic	4.2%	12.7%	Dominican Republic	12.0%
Uruguay	2.4%	12.3%	Uruguay	12.9%
Papua New Guinea	3.3%	12.2%	Papua New Guinea	15.3%
Portugal	5.2%	11.5%	Portugal	13.8%
Yugoslavia	4.0%	9.3%	Yugoslavia	11.1%
Niger	5.1%	9.2%	Niger	11.3%
Nigeria	2.0%	8.1%	Nigeria	7.8%
Mauritius	5.4%	8.1%	Mauritius	8.1%
Morocco	4.5%	7.9%	Morocco	10.1%
Brazil	3.8%	7.3%	Brazil	9.4%
Colombia	2.9%	7.7%	Colombia	8.1%
Korea	4.1%	7.7%	Korea	8.6%
Malawi	3.6%	6.8%	Malawi	7.8%
El Salvador	3.3%	6.8%	El Salvador	8.8%
Malaysia	1.4%	6.2%	Malaysia	8.3%
Thailand	3.1%	5.7%	Thailand	5.8%
Guatemala	2.8%	5.5%	Guatemala	7.5%
Sri Lanka	2.4%	5.4%	Sri Lanka	5.4%
Indonesia	1.1%	4.7%	Indonesia	6.4%
Honduras	5.0%	4.5%	Honduras	4.1%
Philippines	-0.2%	3.0%	Philippines	8.5%
Algeria	-0.2%	2.9%	Algeria	6.6%
Turkey	0.0%	2.4%	Turkey	6.7%
Tunisia	0.7%	1.9%	Tunisia	4.1%
Hungary	3.0%	1.8%	Hungary	-49.6%
Kenya	0.0%	1.5%	Kenya	4.9%
Burkina Faso	1.9%	1.3%	Burkina Faso	1.5%
Pakistan	0.6%	1.1%	Pakistan	1.2%
Egypt	0.9%	1.1%	Egypt	1.7%
Cameroon	0.3%	0.9%	Cameroon	2.2%
Paraguay	0.3%	0.3%	Paraguay	0.9%
India	0.1%	0.3%	India	0.3%
Burma	0.1%	0.2%	Burma	0.6%
Bangladesh	-0.1%	0.0%	Bangladesh	0.3%
Ethiopia	0.0%	-0.1%	Ethiopia	0.2%

TABLE 6B (con't.)

	1982	1986
Jordan	0.5%	-0.1%
Burundi	-0.2%	-0.3%
Rwanda	-0.6%	-0.9%
Madagascar	0.2%	-1.0%
Senegal	-1.3%	-1.5%
Haiti	0.0%	-1.7%
Peru	2.4%	-1.9%
Mali	-1.4%	-3.0%
Ghana	-3.0%	-4.0%
Central Afr. Rep	-3.5%	-4.7%
Chad	-4.8%	-5.9%
Sierra Leone	-2.1%	-6.5%
Guyana	-1.5%	-7.2%
Guinea	-4.3%	-10.2%
Benin	-5.1%	-10.9%
Sudan	-5.9%	-12.4%
Tanzania	-3.1%	-13.5%
Mauritania	-8.3%	-15.0%
Zaire	-8.2%	-15.3%
Zambia	-3.2%	-21.1%
Guinea Bissau	-3.2%	-21.7%
Togo	-21.2%	-23.8%

	1986
Jordan	0.0%
Burundi	0.0%
Rwanda	-0.3%
Madagascar	-1.9%
Senegal	0.2%
Haiti	-1.7%
Peru	1.5%
Mali	-1.8%
Ghana	-1.2%
Central Afr. Rep	-1.5%
Chad	-2.1%
Sierra Leone	-3.5%
Guyana	4.6%
Guinea	-4.9%
Benin	-7.1%
Sudan	-4.8%
Tanzania	-8.8%
Mauritania	-5.8%
Zaire	1.6%
Zambia	-5.0%
Guinea Bissau	-18.1%
Togo	-0.9%

TABLE 6C
Gains of Net Worth (Reduction of Debt) From A Constant
Real Interest Rate of Four Percent: Ratio To Debt

Interest Rate CF	Networth gain	DebtShare	1982 Counterfactual since 1978	1986 Counterfactual since 1978
Venezuela			13.3%	35.5%
Ecuador			13.7%	33.3%
Mexico			14.8%	32.3%
Chile			11.6%	29.8%
Yugoslavia			13.0%	28.0%
Panama			13.1%	26.7%
Argentina			7.4%	21.3%
Uruguay			8.3%	20.6%
Costa Rica			-0.8%	20.3%
Dominican Republic			11.6%	20.2%
Portugal			8.9%	19.9%
Brazil			11.2%	18.7%
Nigeria			14.5%	17.3%
Mauritius			10.1%	16.6%
Colombia			11.1%	16.6%
Korea			7.8%	16.5%
El Salvador			8.1%	15.9%
Guatemala			15.6%	14.8%
Papua New Guinea			4.8%	13.3%
Niger			10.5%	13.1%
Thailand			9.3%	12.8%
Ivory Coast			4.6%	10.8%
Algeria			-0.4%	10.2%
Sri Lanka			4.0%	8.6%
Jamaica			1.5%	8.5%
Indonesia			4.0%	8.2%
Malaysia			2.7%	7.7%
Malawi			4.8%	7.5%
Morocco			5.9%	6.4%
Honduras			7.7%	5.5%
Turkey			0.1%	4.2%
Philippines			-0.3%	3.2%
Pakistan			1.8%	2.7%
Tunisia			1.5%	2.7%
Cameroon			0.9%	2.6%
Burkina Faso			2.6%	2.6%
Hungary			7.7%	2.4%
Kenya			0.0%	2.2%
India			0.7%	1.4%
Egypt			1.1%	1.4%
Paraguay			1.2%	0.5%
Burma			0.4%	0.4%
Bangladesh			-0.3%	0.1%
Jordan			0.3%	-0.1%

Interest Rate CF81	Networth gain	DebtShare	1986 Counterfactual since 1981
Venezuela			36.9%
Ecuador			34.2%
Mexico			31.9%
Chile			29.0%
Yugoslavia			33.4%
Panama			27.8%
Argentina			23.4%
Uruguay			21.7%
Costa Rica			22.3%
Dominican Republic			19.1%
Portugal			23.9%
Brazil			22.5%
Nigeria			16.5%
Mauritius			16.7%
Colombia			17.5%
Korea			18.4%
El Salvador			20.6%
Guatemala			20.5%
Papua New Guinea			16.8%
Niger			16.1%
Thailand			13.1%
Ivory Coast			14.8%
Algeria			23.2%
Sri Lanka			8.5%
Jamaica			10.4%
Indonesia			11.1%
Malaysia			10.3%
Malawi			8.5%
Morocco			9.2%
Honduras			5.0%
Turkey			11.9%
Philippines			9.1%
Pakistan			2.8%
Tunisia			5.9%
Cameroon			6.2%
Burkina Faso			3.1%
Hungary			-68.0%
Kenya			7.2%
India			1.9%
Egypt			2.1%
Paraguay			1.7%
Burma			1.4%
Bangladesh			0.5%
Jordan			0.0%

TABLE 6C (con't.)

	1982	1986
Ethiopia	0.0%	-0.2%
Burundi	-1.1%	-0.7%
Madagascar	0.2%	-1.0%
Senegal	-2.1%	-1.9%
Mali	-2.0%	-2.7%
Peru	5.0%	-3.2%
Guyana	-0.8%	-3.3%
Somalia	-1.0%	-3.3%
Rwanda	-4.1%	-3.9%
Haiti	0.1%	-5.3%
Zambia	-3.4%	-7.0%
Mauritania	-5.4%	-7.1%
Ghana	-9.0%	-9.4%
Central Afr. Rep	-10.9%	-10.0%
Sudan	-7.1%	-11.0%
Guinea	-5.7%	-11.1%
Guinea Bissau	-3.3%	-11.8%
Sierra Leone	-5.5%	-13.5%
Zaire	-15.7%	-14.1%
Tanzania	-6.6%	-15.4%
Benin	-8.1%	-17.0%
Togo	-19.0%	-22.5%
Chad	-17.7%	-25.6%

	1986
Ethiopia	0.5%
Burundi	0.0%
Madagascar	-1.7%
Senegal	0.3%
Mali	-1.6%
Peru	2.4%
Guyana	2.1%
Somalia	-2.6%
Rwanda	-1.4%
Haiti	-5.1%
Zambia	-1.7%
Mauritania	-2.8%
Ghana	-2.8%
Central Afr. Rep	-3.1%
Sudan	-4.3%
Guinea	-5.3%
Guinea Bissau	-9.9%
Sierra Leone	-7.3%
Zaire	1.5%
Tanzania	-10.0%
Benin	-11.1%
Togo	-0.8%
Chad	-9.2%

Table 7
Actual Terms of Trade With Average of 1969 to 1978 As Base Line = 1.00

s of Trade tual over 1969 to 1978	1978	1979	1980	1981	1982	1983	1984	1985	1986
				Manufacturing Exporters					
ordan	1.05	1.02	0.97	0.92	0.99	0.99	1.03	1.02	1.17
Yugoslavia	1.01	0.99	0.99	0.98	1.01	0.99	0.94	0.92	1.02
hilippines	0.88	0.95	0.87	0.84	0.80	0.86	0.88	0.86	1.02
Morocco	0.90	0.97	0.92	0.87	0.84	0.86	0.85	0.86	0.95
Korea	1.02	1.00	0.88	0.86	0.88	0.88	0.90	0.89	0.95
Tunisia	0.98	1.08	1.12	1.15	1.17	1.17	1.11	1.06	0.95
Portugal	1.00	1.00	0.96	0.91	0.89	0.89	0.88	0.88	0.94
Thailand	0.91	0.93	0.89	0.81	0.75	0.80	0.79	0.75	0.81
Hungary	0.91	0.89	0.89	0.88	0.86	0.84	0.82	0.82	0.78
Uruguay	0.78	0.79	0.76	0.78	0.79	0.71	0.68	0.65	0.75
ndia	1.00	0.90	0.65	0.69	0.70	0.78	0.72	0.73	0.75
Brazil	1.0	0.89	0.75	0.65	0.65	0.64	0.69	0.65	0.72
Turkey	0.84	0.83	0.64	0.59	0.56	0.55	0.62	0.63	0.70
Pakistan	0.96	1.04	1.00	0.74	0.66	0.66	0.70	0.69	0.66
				Primary Exporters					
Niger	1.03	1.44	1.18	1.32	1.72	1.88	1.92	1.84	1.88
Rwanda	1.00	1.16	0.87	0.70	0.80	1.20	1.80	1.19	1.84
Tanzania	0.99	0.85	1.36	1.25	1.24	1.23	1.28	1.17	1.51
Costa Rica	1.09	1.01	1.01	0.83	0.86	0.93	0.96	1.05	1.31
Ethiopia	0.91	0.91	0.91	0.91	0.91	0.91	0.82	0.95	1.28
Sudan	1.08	1.13	1.01	1.14	1.38	1.31	1.24	1.61	1.19
Guinea Bissau	0.83	0.78	0.53	1.13	1.06	1.08	1.29	1.31	1.15
Dominican Republic	0.79	0.81	1.01	1.06	0.91	0.96	0.97	0.92	1.10
Sri Lanka	1.26	1.10	1.01	0.95	0.94	1.07	1.26	1.06	1.07
Mauritania	0.95	0.84	0.80	0.88	0.90	0.85	0.90	1.02	1.06
Jamaica	1.12	0.95	0.96	0.83	0.81	0.78	0.87	0.90	1.02
Ivory Coast	1.29	1.15	1.00	0.87	0.85	0.86	0.99	0.97	1.03
Senegal	1.05	0.99	0.94	1.02	0.99	0.97	1.02	1.00	1.01
Central Afr. Rep	1.08	0.98	0.94	0.90	0.93	0.92	0.96	0.93	1.00
Colombia	1.18	1.17	1.07	0.94	0.96	0.97	1.03	1.05	0.99
Paraguay	1.19	0.65	1.13	1.02	0.96	1.09	1.09	0.94	0.98
Haiti	1.14	0.95	0.98	0.95	0.86	0.91	0.89	0.90	0.93
Malaysia	1.09	1.17	1.21	1.10	1.08	1.11	1.19	1.14	0.96
Mali	0.93	0.93	0.93	0.93	0.94	1.02	1.14	1.04	0.91
Togo	0.99	1.11	0.94	0.90	0.91	0.91	0.95	0.95	0.91
Panama	0.93	0.89	0.82	0.81	0.77	0.78	0.85	0.86	0.89
El Salvador	1.07	0.96	0.89	0.74	0.73	0.67	0.67	0.67	0.85
Guyana	0.92	0.85	0.91	0.83	0.79	0.74	0.71	0.72	0.83
Guatemala	0.98	0.87	0.81	0.74	0.70	0.71	0.75	0.68	0.81
Madagascar	0.81	0.70	0.66	0.65	0.72	0.78	0.94	0.75	0.79
Burundi	0.91	0.96	0.88	0.53	0.55	0.68	0.72	0.66	0.79
Bangladesh	0.69	0.67	0.76	0.66	0.53	0.59	0.69	0.95	0.72
Papua New Guinea	0.90	1.05	0.94	0.72	0.67	0.73	0.79	0.72	0.70
Kenya	0.99	0.91	0.84	0.71	0.68	0.64	0.72	0.64	0.70

TABLE 7 (con't.)

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Peru	0.86	1.18	1.16	1.01	0.98	0.98	0.95	0.76	0.64
Benin	0.95	0.88	0.84	0.72	0.71	0.71	0.70	0.70	0.61
Chile	0.65	0.72	0.71	0.65	0.59	0.62	0.57	0.53	0.57
Argentina	0.62	0.68	0.78	0.84	0.64	0.63	0.69	0.61	0.56
Malawi	0.97	0.71	0.72	0.85	0.86	0.79	0.79	0.53	0.54
Zaire	0.77	0.95	0.88	0.73	0.63	0.61	0.66	0.65	0.54
Zambia	0.52	0.73	0.63	0.46	0.34	0.40	0.49	0.55	0.44
Sierra Leone	1.15	1.59	1.10	1.10	0.79	0.62	0.44	0.40	0.37
Burkina Faso	0.79	0.84	0.87	0.85	0.87	0.97	1.01	0.86	
Burma	0.99	1.04	1.11	1.15	0.98	0.96			
Chad	0.85	0.81	0.74	0.76	0.70	0.85	0.89	0.89	
Ghana	1.13	1.13	1.31	1.20	0.81	0.79	1.10	1.10	
Guinea	1.24	1.19	1.17	1.41	1.29	1.27	1.38	1.42	
Honduras	1.24	1.11	1.13	1.01	0.91	0.84	0.83	0.85	
Somalia	1.35	1.41	1.39	1.40	1.23	1.21	1.22	1.21	
				Oil Exporters					
Indonesia	1.28	1.63	2.11	2.46	2.39	2.27	2.26	2.23	2.00
Venezuela	1.37	1.87	2.49	2.39	1.85	1.61	1.98	1.84	1.36
Algeria	1.11	1.41	2.00	2.35	2.27	2.22	2.22	2.16	1.21
Nigeria	1.37	1.08	1.40	2.53	2.19	2.03	2.29	1.89	0.89
Ecuador	0.98	1.20	1.32	1.21	1.17	1.15	1.10	1.02	0.75
Mexico	1.01	1.11	1.42	1.52	1.49	1.04	1.00	0.93	0.70
Egypt	0.86	1.09	1.20	1.09	1.08	1.05	1.03	0.89	0.66
Cameroon	0.92	0.76	0.80	0.78	0.80	0.76	0.83	0.81	0.66

Table 8a
Improvements in Resource Balance (as % of GDP)
With 1969 to 1978 Average Terms of Trade

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Resource Bal CFI gain GDP Share									
Oil Exporters	-2.9%	-5.4%	-9.6%	-9.8%	-8.7%	-7.2%	-7.2%	-5.7%	-0.4%
Manufacturers	0.5%	0.9%	3.0%	4.2%	4.1%	4.8%	4.7%	5.3%	3.8%
Primary	-0.7%	-0.1%	1.5%	2.3%	2.0%	1.5%	0.0%	0.3%	2.1%
Low Income	1.0%	0.5%	1.1%	3.0%	3.9%	4.8%	2.3%	2.2%	2.2%
Middle Income	-1.0%	-1.5%	-2.1%	-1.8%	-1.2%	-0.7%	-1.0%	0.0%	2.2%
Non Oil Exporting	0.0%	0.6%	2.7%	3.7%	3.4%	3.4%	3.1%	3.8%	3.4%
Africa	-2.6%	-0.1%	-2.8%	-4.9%	-2.3%	-0.8%	-3.3%	-2.5%	2.4%
Asia	-1.6%	-3.6%	-4.4%	-3.2%	-2.2%	-2.5%	-3.0%	-2.1%	-1.5%
India	0.0%	1.0%	3.5%	3.0%	2.6%	1.8%	2.5%	2.4%	2.1%
EMENA	1.2%	-0.5%	-0.6%	0.4%	0.8%	1.3%	1.7%	2.3%	3.7%
LAC	-0.9%	-1.1%	-1.1%	-0.7%	-0.5%	0.3%	0.0%	1.0%	3.1%
HICS	-1.4%	-1.1%	-1.5%	-1.5%	-1.0%	-0.4%	-0.8%	0.1%	2.6%
SAL Countries	-0.6%	-0.3%	-0.4%	-0.4%	0.0%	0.8%	0.4%	1.1%	2.5%
Non SAL Countries	-1.6%	-6.2%	-8.6%	-6.5%	-4.3%	-4.0%	-5.1%	-3.6%	1.1%

Note: Asia excludes India and China

TABLE 8B
Improvements in Resource Balance (as % of GDP)
With 1969 to 1978 Average Terms of Trade

Resource Bal CF1 gain GDP Share	1978	1979	1980	1981	1982	1983	1984	1985	1986
Manufacturing Exporters									
Hungary	4%	5%	5%	5%	7%	9%	11%	12%	13%
Uruguay	5%	4%	5%	4%	4%	9%	9%	11%	10%
Turkey	1%	1%	5%	7%	9%	10%	10%	10%	8%
Thailand	2%	2%	3%	6%	6%	5%	6%	7%	7%
Pakistan	1%	-1%	1%	6%	8%	8%	7%	7%	6%
Brazil	0%	1%	3%	4%	4%	4%	4%	5%	4%
Korea	-1%	0%	5%	6%	5%	5%	4%	4%	3%
Philippines	2%	1%	3%	4%	4%	3%	3%	3%	3%
Portugal	0%	0%	3%	5%	4%	4%	5%	5%	2%
India	0%	1%	4%	3%	3%	2%	3%	2%	2%
Tunisia	1%	-3%	-3%	-5%	-6%	-7%	-5%	-3%	0%
Morocco	2%	1%	3%	5%	5%	4%	5%	4%	0%
Yugoslavia	0%	1%	1%	1%	0%	0%	1%	1%	-1%
Jordan	-5%	-9%	2%	10%	5%	-1%	-2%	-5%	-25%
Primary Exporters									
Zambia	29%	12%	19%	26%	35%	29%	26%	24%	48%
Zaire	4%	1%	3%	7%	10%	14%	17%	19%	28%
Chile	11%	8%	9%	9%	12%	13%	17%	23%	27%
Papua New Guinea	5%	-2%	3%	16%	19%	15%	12%	17%	19%
Malawi	2%	13%	11%	5%	4%	6%	6%	16%	15%
Kenya	1%	3%	7%	10%	10%	10%	8%	11%	10%
Guyana	5%	11%	7%	15%	14%	16%	19%	19%	10%
Sierra Leone	-2%	-8%	1%	2%	6%	5%	7%	6%	9%
Benin	3%	5%	5%	10%	9%	10%	10%	10%	9%
Panama	3%	5%	10%	10%	12%	11%	6%	6%	7%
Paraguay	-3%	9%	0%	1%	2%	1%	2%	7%	3%
Peru	3%	-4%	-3%	0%	1%	0%	1%	4%	6%
Malaysia	-4%	-8%	-10%	-4%	-3%	-5%	-8%	-7%	5%
El Salvador	-3%	2%	4%	9%	8%	11%	11%	14%	4%
Burundi	1%	2%	4%	9%	11%	7%	6%	7%	4%
Madagascar	5%	10%	11%	9%	6%	4%	3%	5%	4%
Guatemala	1%	3%	5%	6%	6%	4%	4%	5%	1%
Colombia	-3%	-2%	-1%	1%	1%	0%	0%	-1%	1%
Haiti	-4%	0%	-3%	1%	4%	3%	3%	3%	1%
Central Afr. Rep	-2%	1%	3%	2%	2%	2%	0%	3%	0%
Ivory Coast	-8%	-4%	1%	5%	6%	6%	1%	1%	-1%
Guinea	-5%	-4%	-4%	-9%	-7%	-6%	-8%	-9%	-1%
Bangladesh	0%	1%	-1%	2%	5%	4%	1%	-3%	-1%
Jamaica	-5%	2%	2%	10%	11%	12%	8%	7%	-2%
Argentina	-6%	0%	6%	1%	-3%	-4%	-4%	-7%	-2%
Togo	-6%	-6%	0%	1%	0%	1%	1%	-2%	-1%

TABLE 8B (con't.)

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Senegal	-5%	-1%	-1%	-6%	-5%	-4%	-5%	-4%	-4%
Mali	2%	3%	3%	-1%	-2%	-6%	-10%	-10%	-4%
Sudan	-1%	-2%	-2%	-5%	-11%	-8%	-7%	-8%	-4%
Dominican Republic	4%	5%	-3%	-2%	1%	2%	4%	3%	-4%
Rwanda	2%	-2%	4%	5%	4%	-1%	-5%	0%	-6%
Ethiopia	1%	1%	1%	0%	0%	0%	2%	-1%	-7%
Mauritania	-3%	4%	8%	4%	0%	5%	2%	-5%	-7%
Costa Rica	-4%	-2%	0%	9%	7%	3%	1%	-2%	-10%
Sri Lanka	-12%	-8%	-5%	-1%	-3%	-7%	-10%	-6%	-10%
Guinea Bissau	4%	10%	13%	0%	-7%	-13%	-12%	-7%	-11%
Niger	0%	-5%	2%	-4%	-12%	-16%	-19%	-19%	-13%
Tanzania	1%	3%	-11%	-8%	-7%	-5%	-6%	-6%	-20%
Honduras	-9%	-5%	-5%	-1%	3%	5%	6%	5%	
Ghana	-2%	-3%	-5%	-3%	3%	39%	-1%	-1%	
Burma	0%	0%	-1%	-2%	-2%	0%			
Burkina Faso	5%	6%	6%	3%	3%	1%	-1%	3%	
Chad	6%	10%	14%	10%	11%	5%	4%	3%	
Somalia	-3%	-4%	-3%	-3%	0%	-3%	0%	10%	
				Oil Exporters					
Egypt	11%	-3%	-5%	1%	1%	3%	4%	7%	15%
Cameroon	3%	7%	6%	7%	6%	8%	6%	5%	10%
Ecuador	1%	-4%	-5%	-3%	-2%	-4%	-4%	-4%	7%
Mexico	0%	-1%	-4%	-4%	-6%	-2%	-2%	0%	7%
Nigeria	-7%	-2%	-7%	-12%	-7%	-6%	-3%	-7%	1%
Algeria	-1%	-8%	-16%	-19%	-17%	-15%	-14%	-13%	-3%
Venezuela	-9%	-16%	-21%	-18%	-10%	-9%	-15%	-13%	-7%
Indonesia	-5%	-12%	-18%	-18%	-15%	-16%	-15%	-14%	-17%

TABLE 9A

Gains of Debtors with Counterfactual Terms of Trade
(Base export and import prices relative to the manufacturing unit value as in 1969-78; Simulated since 1978)

Terms of Trade	1982	1984	1986
CF Networth gain	(in current dollars)		
Africa	($27,079)	($40,133)	($46,454)
Asia	($46,498)	($74,181)	($101,512)
India	$20,331	$34,082	$49,918
EMENA	$6,109	$16,865	$27,374
LAC	($34,311)	($43,619)	($27,054)
Low Income	$12,621	$24,660	$34,510
Middle Income	($114,401)	($165,730)	($172,157)
Non oil Exporting	$101,453	$177,254	$270,067
Oil Exporters	($213,854)	($342,984)	($442,224)
Manufacturers	$95,257	$171,819	$261,513
Primary	$18,816	$30,096	$43,064
HICs	($67,770)	($97,772)	($94,786)
Hics Oil Countries	($126,477)	($196,207)	($237,423)
Hics Non Oil Countries	$58,706	$96,435	$142,637
SAL Countries	($21,662)	($14,661)	$22,399
Non SAL Countries	($80,118)	($126,409)	($160,046)
CF Networth gain GDPshare	(as percent of GDP)		
Africa	-15.5%	-24.5%	-35.8%
Asia	-15.7%	-24.2%	-33.1%
India	11.1%	17.6%	21.8%
EMENA	2.1%	6.1%	11.1%
LAC	-4.8%	-6.8%	-4.1%
Low Income	10.5%	21.2%	27.1%
Middle Income	-8.4%	-13.0%	-13.2%
Non Oil Exporting	12.1%	23.0%	30.6%
Oil Exporters	-41.8%	-68.3%	-105.2%
Manufacturers	14.7%	30.4%	38.1%
Primary	6.0%	9.3%	13.3%
HICs	-7.6%	-12.3%	-11.9%
Hics Oil Countries	-37.1%	-60.2%	-100.8%
Hics Non Oil Countries	10.6%	20.4%	25.5%
SAL Countries	-1.8%	-1.3%	2.0%
Non SAL Countries	-28.7%	-46.2%	-53.4%
CF Networth gain DebtShare	(as percent of total debt)		
Africa	-44.2%	-56.4%	-50.8%
Asia	-37.0%	-50.9%	-57.4%
India	80.2%	109.0%	120.8%
EMENA	4.7%	12.3%	21.0%
LAC	-10.6%	-12.0%	-6.9%
Low Income	21.5%	38.2%	41.1%
Middle Income	-19.7%	-25.4%	-22.9%
Non oil Exporting	27.0%	42.1%	55.0%
Oil Exporters	-104.5%	-147.7%	-168.9%
Manufacturers	36.7%	59.6%	76.8%
Primary	10.8%	15.2%	18.3%
HICs	-17.5%	-22.7%	-20.0%
Hics Oil Countries	-91.1%	-122.0%	-141.2%
Hics Non Oil Countries	23.7%	35.5%	46.7%
SAL Countries	-4.3%	-2.6%	3.4%
Non SAL Countries	-60.0%	-84.3%	-93.0%

Note: Asia excludes India and China

TABLE 9B
Increase of Net Worth (Reduction of Debt) From Accumulated Value of Resource Balance Gains From The Terms of Trade Effects

Terms of Trade CF Networth gain	1982 Share of Debt	1986 Share of Debt	Terms of Trade CF Networth gain	1982 Share of GDP	1986 Share of GDP
	MFG. Exporters			MFG. Exporters	
Uruguay	88.9%	158.6%	Uruguay	25.4%	94.6%
Turkey	74.7%	135.2%	Turkey	27.7%	76.3%
Hungary	84.6%	124.7%	Hungary	32.9%	90.8%
Thailand	65.8%	124.4%	Thailand	21.8%	55.2%
India	80.2%	120.8%	India	11.1%	21.8%
Pakistan	40.6%	117.6%	Pakistan	14.9%	48.3%
Brazil	36.9%	80.9%	Brazil	12.6%	33.6%
Korea	29.5%	70.0%	Korea	15.4%	32.8%
Portugal	26.5%	56.9%	Portugal	15.4%	33.0%
Philippines	24.3%	44.0%	Philippines	14.8%	40.9%
Morocco	24.8%	31.8%	Morocco	18.9%	39.4%
Yugoslavia	10.6%	18.9%	Yugoslavia	3.2%	6.3%
Jordan	7.9%	-31.0%	Jordan	5.1%	-28.2%
Tunisia	-39.0%	-57.9%	Tunisia	-19.2%	-40.2%
	Primary Exporters			Primary Exporters	
Chad	270.1%	349.9%	Chad	72.5%	80.2%
Zambia	139.5%	195.1%	Zambia	131.3%	591.9%
Chile	85.1%	183.1%	Chile	60.7%	227.9%
Guatemala	145.3%	178.9%	Guatemala	25.6%	65.9%
El Salvador	58.8%	174.7%	El Salvador	24.0%	74.9%
Papua New Guinea	64.3%	139.4%	Papua New Guinea	44.3%	127.4%
Burundi	130.0%	130.3%	Burundi	23.9%	58.2%
Zaire	52.7%	128.3%	Zaire	27.5%	139.5%
Kenya	66.4%	126.2%	Kenya	17.2%	86.0%
Malawi	59.3%	114.5%	Malawi	47.3%	104.2%
Benin	51.9%	94.3%	Benin	32.9%	60.0%
Panama	45.3%	89.5%	Panama	41.5%	85.6%
Burkina Faso	100.8%	94.7%	Burkina Faso	34.6%	41.6%
Madagascar	73.8%	80.4%	Madagascar	48.6%	87.5%
Guyana	35.4%	65.7%	Guyana	67.1%	144.9%
Sierra Leone	3.1%	64.3%	Sierra Leone	1.2%	30.9%
Paraguay	37.3%	59.5%	Paraguay	8.7%	33.7%
Ghana	-32.3%	54.3%	Ghana	-10.7%	22.8%
Jamaica	19.4%	44.9%	Jamaica	18.8%	73.8%
Dominican Republ	17.5%	29.8%	Dominican Republ	6.3%	18.8%
Central Afr. Rep	21.2%	22.6%	Central Afr. Rep	6.9%	10.7%
Haiti	-4.0%	22.2%	Haiti	-1.5%	7.2%
Bangladesh	20.0%	19.6%	Bangladesh	7.7%	9.7%
Peru	-5.9%	9.8%	Peru	-2.8%	6.0%
Rwanda	82.8%	9.6%	Rwanda	12.7%	2.3%
Mauritania	8.9%	4.1%	Mauritania	13.6%	8.5%

TABLE 9B (con't.)

	1982	1986
Ivory Coast	-2.1%	3.0%
Somalia	-15.4%	-0.3%
Costa Rica	4.4%	-1.7%
Ethiopia	12.1%	-2.8%
Honduras	-30.9%	-5.8%
Burma	-16.8%	-12.9%
Guinea Bissau	14.2%	-14.6%
Mali	8.6%	-14.8%
Togo	-10.8%	-14.9%
Colombia	-19.0%	-19.9%
Argentina	-2.1%	-31.9%
Senegal	-32.6%	-40.5%
Sudan	-26.7%	-47.1%
Guinea	-39.6%	-67.6%
Tanzania	-43.8%	-80.0%
Malaysia	-62.1%	-91.1%
Sri Lanka	-46.8%	-105.3%
Niger	-34.8%	-118.1%
	Oil Exporters	
Cameroon	91.5%	152.4%
Egypt	4.4%	41.9%
Ecuador	-26.9%	-47.0%
Mexico	-37.9%	-48.3%
Venezuela	-166.4%	-318.1%
Nigeria	-299.2%	-339.3%
Indonesia	-240.3%	-350.5%
Algeria	-173.2%	-394.9%

	1982	1986
Ivory Coast	-2.3%	3.5%
Somalia	-8.4%	
Costa Rica	5.8%	-1.7%
Ethiopia	3.4%	-1.2%
Honduras	-19.9%	-4.8%
Burma	-5.8%	-5.9%
Guinea Bissau	13.6%	-26.7%
Mali	6.1%	-16.6%
Togo	-12.1%	-15.8%
Colombia	-5.0%	-9.3%
Argentina	-1.6%	-19.9%
Senegal	-20.7%	-32.5%
Sudan	-22.2%	-52.9%
Guinea	-29.8%	-61.9%
Tanzania	-20.5%	-70.1%
Malaysia	-30.9%	-65.4%
Sri Lanka	-28.2%	-66.6%
Niger	-17.0%	-82.8%
	Oil Exporters	
Cameroon	29.2%	57.3%
Egypt	3.4%	33.5%
Ecuador	-17.0%	-38.1%
Mexico	-19.5%	-39.1%
Venezuela	-78.3%	-215.7%
Nigeria	-41.1%	-159.9%
Indonesia	-67.2%	-201.2%
Algeria	-63.9%	-112.8%

TABLE 10-A

Increase of Networth (Reduction of Debt) with Resource Balance Gains From CF Terms Of Trade and With A Four Percent Real Interest:

	1982	1984	1986
CF Networth gain Combined			
Africa	($18,379)	($22,045)	($34,518)
Asia	($32,238)	($36,024)	($67,476)
India	$18,332	$28,115	$45,613
EMENA	$5,134	$23,825	$45,035
LAC	$11,906	$65,025	$89,930
Low Income	$8,586	$18,048	$26,336
Middle Income	($42,163)	$12,733	$6,634
Non oil Exporting	$117,509	$216,797	$317,699
Oil Exporters	($159,672)	($204,064)	($311,065)
Manufacturers	$100,557	$186,742	$284,243
Primary	$25,539	$48,103	$59,792
HICs	($7,381)	$40,989	$48,015
Hics Oil Countries	($81,001)	($90,588)	($134,754)
Hics Non Oil Countries	$73,620	$131,578	$182,769
CF Networth gain Combined (Share of GDP)			
Africa	-10.5%	-13%	-27%
Asia	-10.9%	-11.7%	-22.0%
India	9.9%	14.6%	19.9%
EMENA	1.7%	8.6%	13.3%
LAC	1.7%	10.1%	13.7%
Low Income	7.1%	15.5%	20.7%
Middle Income	-3.1%	1.0%	0.5%
Non oil Exporting	14.0%	28.1%	36.0%
Oil Exporters	-30.9%	-40.6%	-74.0%
Manufacturers	15.5%	33.1%	41.4%
Primary	8.2%	14.9%	18.4%
HICs	-0.8%	5.1%	6.0%
Hics Oil Countries	-23.7%	-28.1%	-57.2%
Hics Non Oil Countries	13.2%	27.8%	32.7%
SAL Countries	2.3%	9.3%	12.9%
Non SAL Countries	-22.0%	-26.8%	-37.5%
CF Networth gain Combined (Share of Debt)			
Africa	-30%	-31%	-38%
Asia	-25.6%	-24.7%	-38.1%
India	71.5%	89.9%	110.4%
EMENA	4.0%	17.4%	25.3%
LAC	3.7%	17.8%	23.0%
Low Income	14.6%	28.0%	31.4%
Middle Income	-7.2%	1.9%	0.9%
Non oil Exporting	31.3%	51.5%	64.7%
Oil Exporters	-77.3%	-87.9%	-118.8%
Manufacturers	38.7%	64.8%	83.5%
Primary	14.6%	24.3%	25.5%
HICs	-1.9%	9.5%	10.1%
Hics Oil Countries	-58.4%	-56.9%	-80.2%
Hics Non Oil Countries	29.7%	48.4%	59.8%
SAL Countries	5.5%	18.3%	21.9%
Non SAL Countries	-46.0%	-48.8%	-65.4%

Note: Asia Excludes India and China

TABLE 10B
Increase of Net Worth (Reduction of Debt) with resource balance gains from CF terms of trade and with a four percent real interest: share of GDP

CF Networth gain Combined GDPshare	1979	1980	1981	1982	1983	1984	1985	1986
Zambia	8.4%	25.3%	52.3%	91.1%	137.3%	195.4%	237.6%	456.0%
Chile	7.0%	14.2%	23.8%	51.9%	85.7%	116.8%	174.7%	217.6%
Guyana	6.1%	10.2%	29.4%	54.1%	75.7%	108.5%	126.7%	132.5%
Papua New Guinea	-3.7%	-1.2%	16.0%	40.1%	60.3%	79.1%	106.5%	126.6%
Zaire	-2.9%	-3.0%	3.3%	13.7%	31.3%	66.2%	91.4%	113.9%
Malawi	11.9%	22.1%	31.1%	38.9%	45.1%	53.6%	73.9%	98.2%
Panama	2.3%	12.3%	27.6%	45.9%	62.8%	74.1%	82.2%	95.8%
Jamaica	0.6%	2.7%	14.3%	26.7%	39.3%	67.3%	93.7%	89.2%
Uruguay	3.7%	7.8%	12.3%	21.1%	50.5%	67.0%	85.1%	88.2%
Mauritius	5.2%	14.9%	28.6%	47.6%	59.5%	76.5%	89.7%	82.6%
Kenya	1.0%	7.5%	19.3%	33.0%	48.2%	57.7%	71.9%	81.4%
El Salvador	0.9%	4.9%	16.1%	27.1%	39.2%	47.9%	67.2%	80.3%
Hungary	5.3%	12.5%	18.6%	25.1%	36.0%	47.0%	59.1%	76.8%
Madagascar	9.7%	19.6%	31.9%	39.9%	45.5%	59.1%	67.5%	72.7%
Turkey	0.4%	4.6%	12.2%	23.8%	36.6%	49.8%	60.3%	71.6%
Guatemala	2.7%	6.7%	15.4%	22.5%	27.2%	30.8%	36.6%	58.5%
Chad	8.7%	22.4%	37.0%	51.5%	55.6%	68.4%	57.6%	56.0%
Benin	4.3%	6.6%	16.8%	26.4%	38.5%	51.0%	58.1%	55.1%
Thailand	1.6%	4.6%	11.7%	20.3%	26.1%	32.8%	46.0%	54.7%
Cameroon	6.1%	10.8%	17.6%	25.3%	34.0%	39.4%	46.8%	53.5%
Burundi	2.1%	6.1%	15.0%	25.3%	31.3%	40.9%	46.2%	52.1%
Pakistan	-1.1%	-0.3%	6.3%	14.1%	23.5%	29.1%	36.5%	47.3%
Morocco	-0.2%	2.6%	10.8%	19.1%	29.2%	40.9%	47.9%	42.0%
Portugal	-1.1%	1.4%	9.6%	18.9%	30.4%	44.1%	51.5%	41.4%
Philippines	-1.8%	-0.3%	5.2%	11.8%	20.5%	28.8%	35.0%	39.6%
Brazil	-0.3%	2.2%	8.0%	14.8%	27.6%	34.1%	39.3%	39.4%
Korea	-1.3%	2.6%	10.9%	18.8%	25.4%	30.7%	37.6%	39.1%
Paraguay	7.9%	6.6%	7.0%	10.5%	11.5%	17.5%	33.1%	38.6%
Sierra Leone	-8.8%	-9.4%	-7.0%	-0.1%	5.3%	14.6%	17.7%	30.0%
Ivory Coast	-6.0%	-6.1%	0.3%	13.6%	27.4%	36.6%	41.2%	28.4%
Egypt	-4.3%	-9.0%	-6.6%	-3.8%	1.4%	6.7%	14.3%	27.9%
Burkina Faso	7.1%	13.4%	18.0%	23.5%	27.9%	30.8%	32.4%	27.1%
Costa Rica	-3.4%	-4.1%	3.9%	11.5%	34.6%	37.1%	40.7%	22.5%
Ghana	-4.3%	-10.4%	-14.3%	-12.2%	27.2%	24.2%	23.4%	21.1%
India	0.9%	4.3%	7.3%	9.9%	11.2%	14.6%	16.2%	19.9%
Dominican Republic	3.8%	1.7%	1.4%	5.0%	9.3%	18.0%	25.4%	19.9%
Yugoslavia	-0.4%	-0.4%	2.9%	6.4%	11.5%	16.7%	19.9%	14.1%
Honduras	-5.6%	-10.7%	-9.1%	-2.8%	4.0%	10.5%	15.7%	13.7%
Haiti	0.3%	-2.5%	-1.6%	2.1%	4.7%	7.6%	10.3%	10.3%
Central Afr. Rep	-0.3%	1.1%	3.1%	5.0%	8.0%	8.4%	10.8%	9.0%
Bangladesh	1.0%	-0.1%	2.3%	7.4%	12.1%	11.7%	7.9%	9.4%
Colombia	-2.7%	-3.9%	-1.5%	1.3%	3.1%	4.3%	5.5%	4.4%
Peru	-6.5%	-9.0%	-5.6%	-1.9%	0.1%	1.5%	4.3%	2.3%
Mauritania	-0.9%	4.5%	8.4%	8.6%	13.9%	17.3%	12.5%	6.7%
Argentina	-2.4%	2.4%	6.3%	9.4%	8.7%	6.3%	6.9%	-2.3%

TABLE 10B (con't.)

	1979	1980	1981	1982	1983	1984	1985	1986
Rwanda	-2.5%	1.1%	6.2%	9.7%	6.8%	3.4%	3.5%	-2.2%
Ethiopia	0.7%	1.6%	2.1%	2.2%	2.2%	4.8%	4.7%	-2.8%
Ecuador	-5.6%	-10.8%	-9.5%	-6.8%	-6.8%	-3.2%	-3.3%	-3.9%
Mexico	-2.3%	-5.7%	-6.4%	-9.6%	-7.8%	-3.9%	-1.3%	-4.0%
Burma	-0.6%	-2.2%	-4.6%	-5.8%	-5.8%	-5.5%	-5.1%	-5.9%
Mali	2.1%	4.9%	5.0%	3.2%	-2.4%	-11.9%	-22.6%	-24.1%
Jordan	-10.0%	-7.1%	4.1%	9.3%	8.8%	7.3%	4.3%	-25.1%
Senegal	-2.3%	-4.6%	-11.5%	-16.0%	-21.1%	-27.0%	-29.4%	-29.7%
Togo	-14.4%	-18.6%	-23.1%	-26.8%	-29.0%	-30.3%	-31.8%	-33.2%
Tunisia	-3.9%	-7.6%	-12.6%	-18.2%	-23.9%	-28.2%	-30.7%	-37.8%
Sri Lanka	-8.0%	-12.4%	-11.9%	-12.2%	-16.6%	-22.6%	-29.3%	-45.1%
Malaysia	-9.7%	-19.9%	-23.7%	-23.6%	-23.8%	-26.5%	-34.2%	-50.4%
Guinea Bissau	9.0%	22.6%	15.6%	7.6%	-5.3%	-19.4%	-26.6%	-55.4%
Sudan	-4.0%	-10.8%	-14.6%	-27.0%	-36.7%	-47.3%	-56.1%	-74.4%
Niger	-6.3%	-4.4%	-6.3%	-15.6%	-31.3%	-57.8%	-74.5%	-79.8%
Guinea	-6.1%	-12.0%	-22.4%	-30.1%	-34.4%	-42.3%	-53.6%	-81.6%
Tanzania	1.8%	-10.7%	-18.1%	-24.3%	-30.2%	-40.4%	-43.4%	-99.6%
Algeria	-10.9%	-27.2%	-44.9%	-59.3%	-69.1%	-78.3%	-86.2%	-100.6%
Nigeria	-1.8%	-8.6%	-20.9%	-27.7%	-35.0%	-40.9%	-49.6%	-118.8%
Venezuela	-18.3%	-38.6%	-51.3%	-56.1%	-60.9%	-93.4%	-108.8%	-146.0%
Indonesia	-13.3%	-29.0%	-42.4%	-55.6%	-81.1%	-92.1%	-109.1%	-170.4%
Somalia	-4.4%	-7.8%	-9.1%	-7.8%	-10.9%	-7.2%	-0.7%	

TABLE 10C
Increase of Net Worth (Reduction of Debt) with resource balance gains from CF terms of trade and with a four percent real interest: ratio to debt

	1979	1980	1981	1982	1983	1984	1985	1986
CF Networth gain combined Debtshare								
Chad	27.6%	81.6%	124.8%	192.0%	211.9%	248.5%	250.6%	244.0%
El Salvador	3.6%	19.1%	49.2%	66.5%	86.1%	115.0%	147.3%	187.2%
Chile	15.5%	32.2%	49.5%	72.8%	93.1%	112.4%	136.6%	174.9%
Mauritius	17.2%	36.9%	60.5%	88.6%	115.1%	145.7%	156.1%	170.2%
Guatemala	18.1%	45.0%	105.0%	127.3%	136.9%	124.6%	137.7%	158.8%
Cameroon	16.1%	30.1%	53.5%	70.7%	96.2%	118.2%	130.8%	151.5%
Zambia	9.3%	30.3%	58.4%	96.9%	121.4%	141.0%	139.3%	150.3%
Uruguay	20.4%	47.8%	63.8%	73.6%	82.1%	107.4%	113.1%	147.9%
Papua New Guinea	-13.7%	-4.4%	33.8%	58.2%	76.7%	93.1%	108.5%	138.5%
Turkey	1.6%	13.6%	36.7%	64.0%	92.5%	114.7%	122.6%	126.9%
Thailand	6.5%	16.8%	39.0%	61.3%	75.6%	91.6%	100.7%	123.3%
Kenya	2.3%	15.4%	38.3%	58.8%	73.8%	91.0%	96.0%	119.5%
Burundi	13.6%	35.4%	83.0%	113.5%	110.1%	117.7%	111.5%	116.7%
Pakistan	-2.5%	-0.8%	16.8%	38.3%	57.5%	77.3%	90.0%	115.0%
India	6.9%	38.1%	61.9%	71.5%	78.3%	89.9%	94.8%	110.4%
Malawi	18.3%	33.9%	47.2%	52.6%	62.1%	73.2%	85.5%	107.9%
Hungary	356.5%	26.9%	42.2%	64.5%	78.6%	94.8%	93.5%	105.4%
Zaire	-6.0%	-6.3%	6.1%	26.2%	45.9%	65.3%	75.1%	104.8%
Panama	2.4%	14.7%	31.8%	50.1%	62.6%	77.5%	84.4%	100.3%
Brazil	-1.2%	7.3%	26.5%	43.5%	57.6%	68.4%	83.3%	94.8%
Benin	10.5%	18.3%	37.0%	41.8%	54.3%	74.8%	76.0%	96.6%
Korea	-3.7%	5.4%	22.5%	36.0%	48.9%	61.4%	68.4%	83.3%
Portugal	-2.9%	3.8%	19.8%	32.5%	43.4%	57.2%	63.8%	71.5%
Paraguay	33.6%	31.5%	35.3%	45.0%	46.4%	53.7%	59.0%	68.2%
Madagascar	34.4%	51.3%	57.5%	60.5%	62.3%	66.3%	63.2%	66.8%
Sierra Leone	-23.5%	-24.6%	-17.8%	-0.2%	15.1%	36.5%	46.2%	62.4%
Guyana	5.1%	7.9%	20.1%	28.5%	38.8%	50.7%	55.4%	60.1%
Burkina Faso	27.7%	51.3%	61.0%	68.4%	66.1%	64.7%	59.0%	55.3%
Jamaica	0.8%	3.8%	17.0%	27.6%	38.5%	46.1%	48.8%	54.7%
Ghana	-13.9%	-36.5%	-42.6%	-37.0%	73.6%	60.4%	49.7%	51.2%
Philippines	-3.9%	-0.6%	9.6%	19.4%	29.5%	38.5%	43.7%	42.6%
Egypt	-6.1%	-11.7%	-8.8%	-4.8%	1.9%	9.5%	18.6%	34.9%
Morocco	-0.4%	5.4%	16.0%	25.1%	30.9%	38.0%	35.6%	33.9%
Haiti	1.3%	-12.1%	-5.7%	5.8%	13.5%	21.2%	28.3%	31.6%
Dominican Republic	12.2%	5.4%	4.1%	14.0%	20.4%	29.3%	34.2%	31.6%
Ivory Coast	-11.4%	-10.8%	0.4%	12.8%	24.0%	29.4%	29.2%	27.9%
Costa Rica	-6.5%	-7.2%	3.2%	8.7%	25.7%	34.0%	34.9%	22.4%
Central Afr. Rep	-1.8%	4.7%	9.6%	15.5%	20.8%	20.7%	22.2%	19.0%
Honduras	-10.3%	-18.1%	-14.3%	-4.3%	5.7%	14.5%	19.3%	16.7%
Bangladesh	3.8%	-0.3%	7.2%	19.4%	26.7%	29.2%	19.3%	16.5%
Colombia	-13.0%	-18.6%	-6.4%	4.8%	10.6%	13.6%	13.3%	9.5%
Peru	-11.0%	-18.6%	-13.7%	-4.0%	0.1%	2.3%	5.3%	7.7%
Mauritania	-0.8%	3.9%	6.4%	5.7%	8.5%	9.7%	6.1%	1.3%
Somalia	-9.0%	-14.9%	-17.0%	-14.3%	-17.1%	-16.2%	-1.2%	-2.7%
Argentina	-5.9%	5.1%	10.2%	12.3%	12.6%	10.6%	9.3%	-3.3%

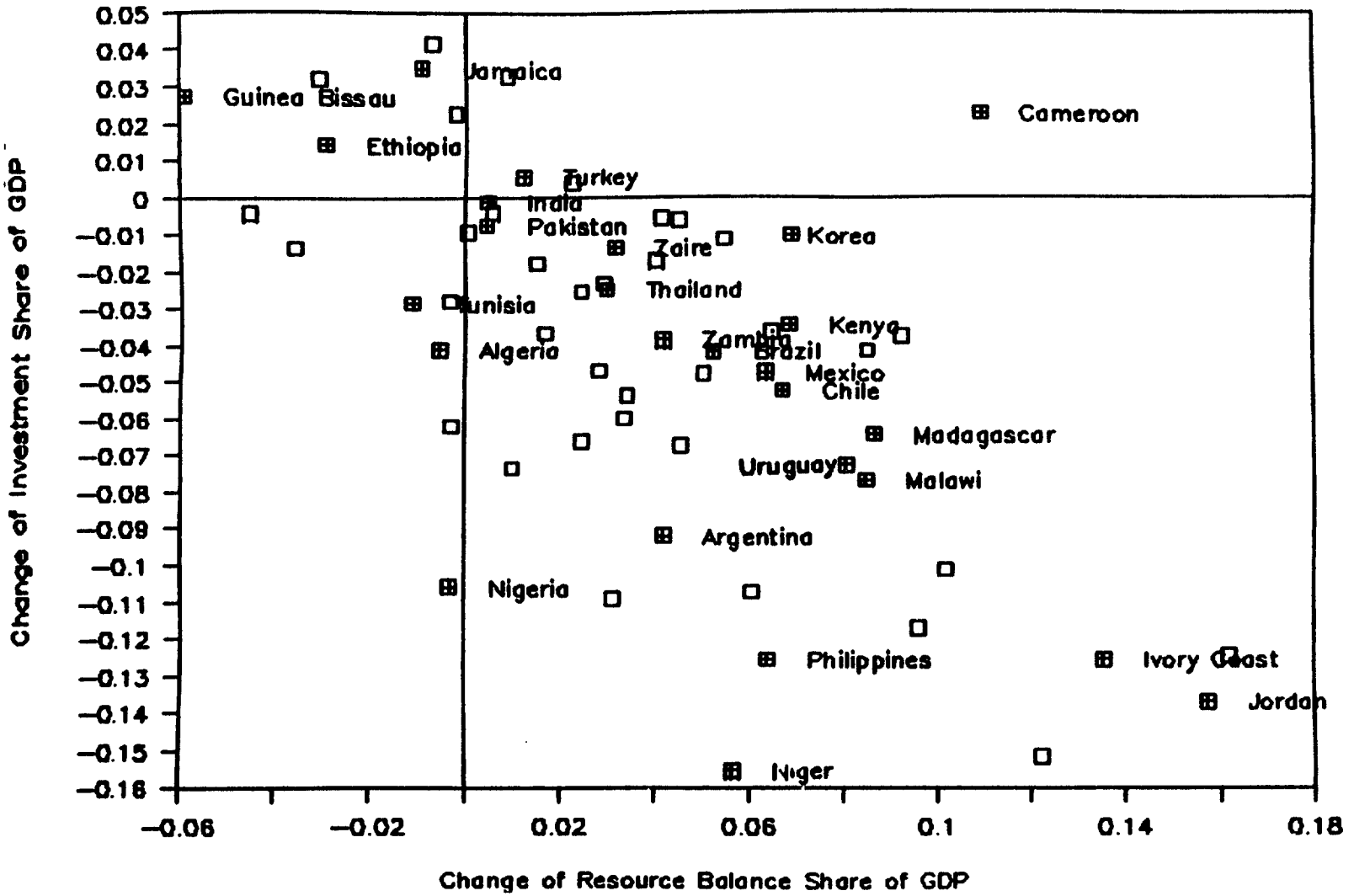
TABLE 10C (con't.)

	1979	1980	1981	1982	1983	1984	1985	1986
Ecuador	-11.6%	-21.2%	-17.0%	-10.8%	-9.6%	-3.9%	-4.7%	-4.8%
Mexico	-7.2%	-18.6%	-19.6%	-18.7%	-12.0%	-6.9%	-2.3%	-5.0%
Ethiopia	3.6%	8.3%	8.0%	7.8%	7.6%	14.9%	11.8%	-6.6%
Rwanda	-16.5%	6.9%	41.8%	63.4%	52.8%	18.1%	16.6%	-9.3%
Burma	-2.6%	-8.7%	-15.5%	-16.9%	-15.2%	-14.6%	-11.3%	-12.9%
Mali	5.7%	11.1%	8.3%	4.5%	-2.6%	-9.9%	-16.2%	-21.6%
Jordan	-18.6%	-13.4%	7.0%	14.4%	12.2%	8.6%	4.6%	-27.6%
Guinea Bissau	15.8%	18.3%	17.7%	8.0%	-4.6%	-11.3%	-14.5%	-30.2%
Togo	-12.6%	-20.4%	-23.5%	-24.1%	-23.1%	-25.8%	-24.4%	-31.3%
Senegal	-5.9%	-10.7%	-20.3%	-25.2%	-27.4%	-31.4%	-30.8%	-37.0%
Tunisia	-8.3%	-18.1%	-28.2%	-36.9%	-45.3%	-50.8%	-48.3%	-54.6%
Malaysia	-42.1%	-74.5%	-64.6%	-47.4%	-39.8%	-47.9%	-51.2%	-62.5%
Sudan	-9.5%	-15.7%	-20.0%	-32.5%	-39.9%	-45.6%	-50.7%	-66.3%
Sri Lanka	-17.3%	-25.9%	-21.5%	-20.3%	-28.3%	-44.5%	-49.3%	-71.3%
Guinea	-8.8%	-19.5%	-29.7%	-40.0%	-49.9%	-67.5%	-75.8%	-89.0%
Tanzania	3.7%	-21.6%	-40.3%	-52.0%	-57.4%	-68.3%	-74.8%	-113.6%
Niger	-21.1%	-12.9%	-13.3%	-31.8%	-60.8%	-84.1%	-91.9%	-113.7%
Venezuela	-37.1%	-77.7%	-106.4%	-119.1%	-110.4%	-127.6%	-155.5%	-215.3%
Nigeria	-23.2%	-99.6%	-165.8%	-201.7%	-167.1%	-200.8%	-227.2%	-252.1%
Indonesia	-39.5%	-108.3%	-172.7%	-198.9%	-218.0%	-244.6%	-257.9%	-296.8%
Algeria	-20.2%	-61.6%	-113.1%	-160.8%	-226.5%	-293.9%	-318.1%	-352.2%

FIGURE 1

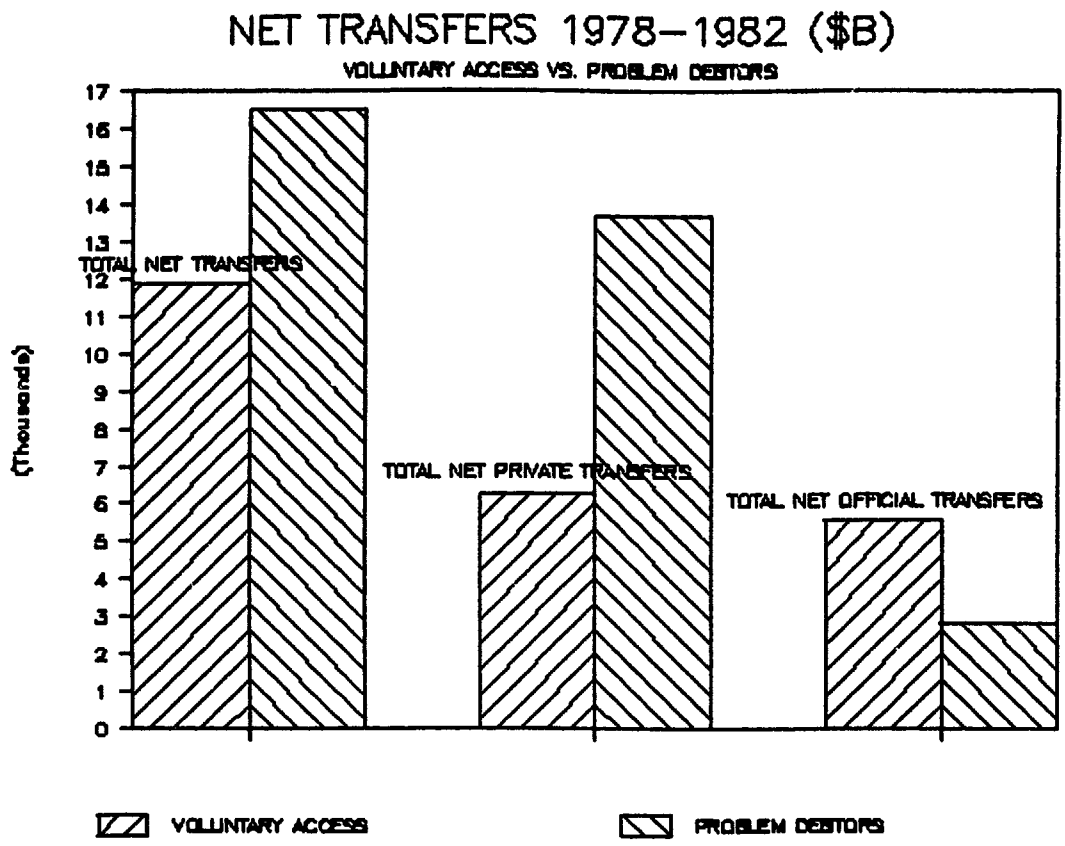
Changes of Investment and Resource Bal.

1979–82 to 1983–86 (Share of GDP)



Correlation Coefficient: -.63
at 5%

FIGURE 2a


NET TRANSFERS 1978–1982 ($B)
VOLUNTARY ACCESS VS. PROBLEM DEBTORS
(Thousands)
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
TOTAL NET TRANSFERS
TOTAL NET PRIVATE TRANSFERS
TOTAL NET OFFICIAL TRANSFERS
VOLUNTARY ACCESS
PROBLEM DEBTORS

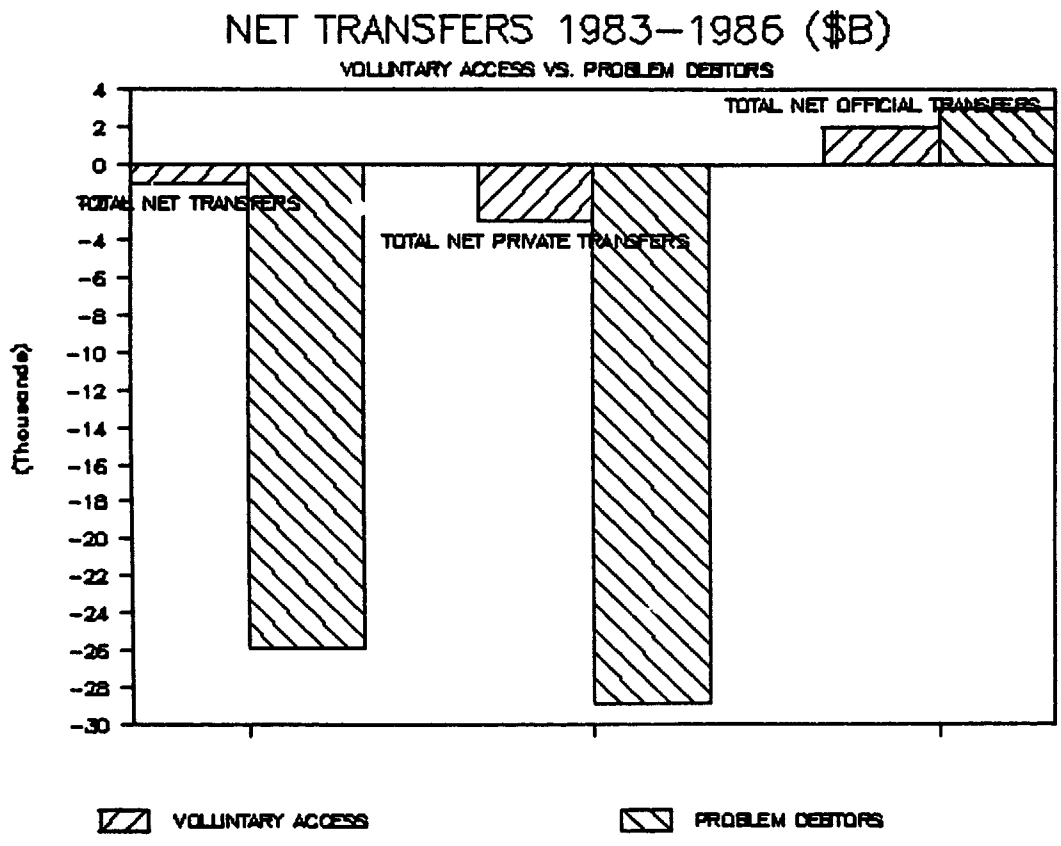
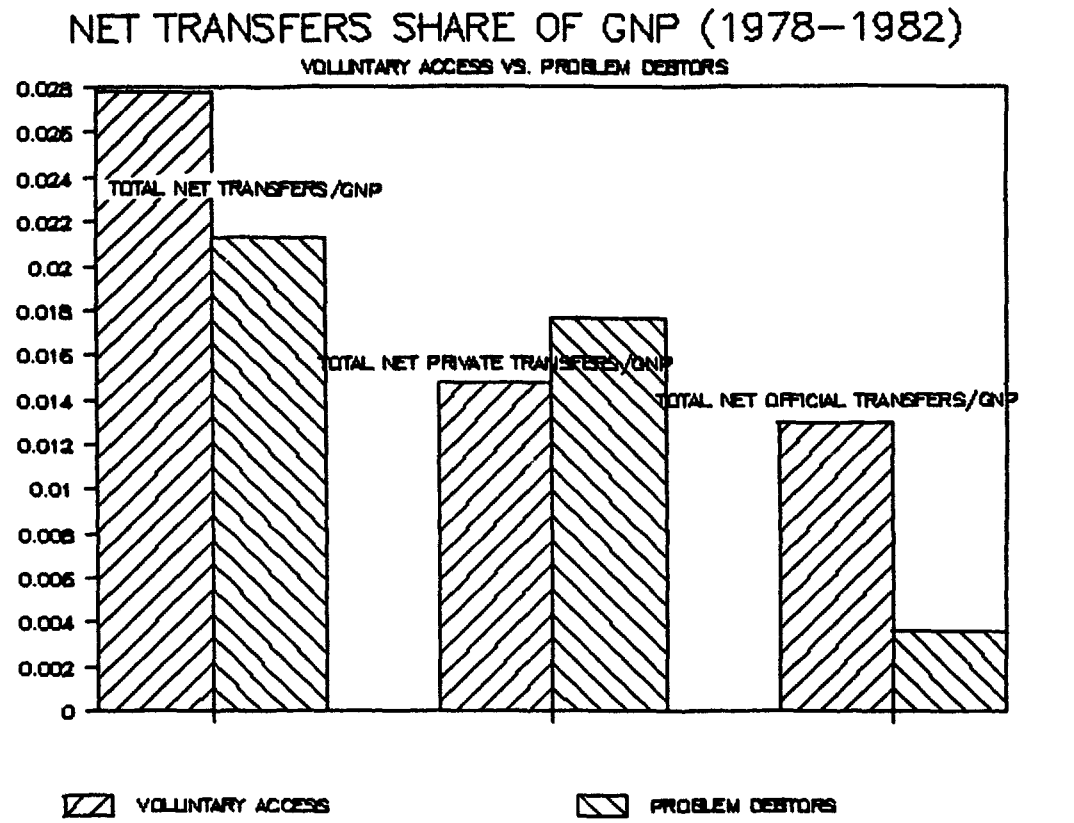

NET TRANSFERS 1983–1986 ($B)
VOLUNTARY ACCESS VS. PROBLEM DEBTORS
(Thousands)
4
2
0
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
TOTAL NET OFFICIAL TRANSFERS
TOTAL NET TRANSFERS
TOTAL NET PRIVATE TRANSFERS
VOLUNTARY ACCESS
PROBLEM DEBTORS

FIGURE 2b


NET TRANSFERS SHARE OF GNP (1978–1982)
VOLUNTARY ACCESS VS. PROBLEM DEBTORS
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
TOTAL NET TRANSFERS/GNP
TOTAL NET PRIVATE TRANSFERS/GNP
TOTAL NET OFFICIAL TRANSFERS/GNP
VOLUNTARY ACCESS
PROBLEM DEBTORS

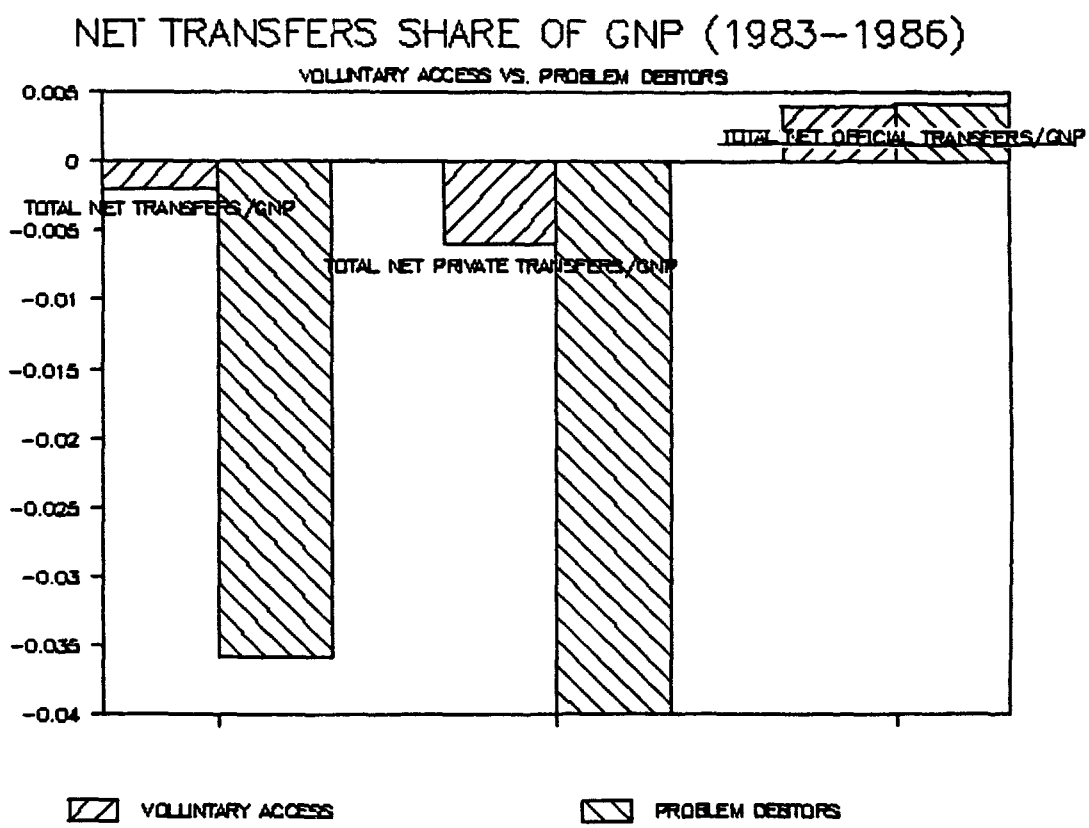
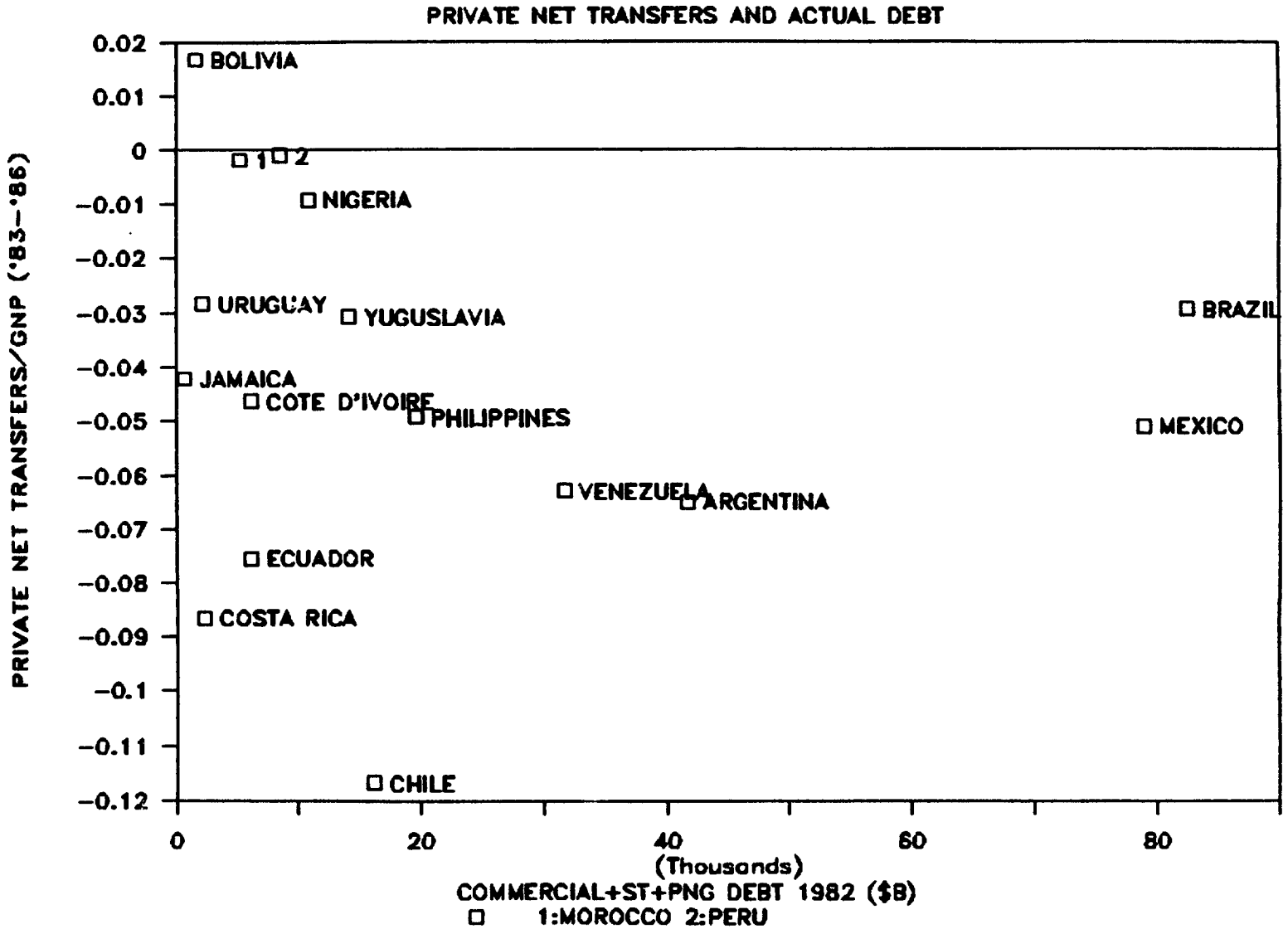

NET TRANSFERS SHARE OF GNP (1983–1986)
VOLUNTARY ACCESS VS. PROBLEM DEBTORS
0.005
0
-0.005
-0.01
-0.015
-0.02
-0.025
-0.03
-0.035
-0.04
TOTAL NET OFFICIAL TRANSFERS/GNP
TOTAL NET TRANSFERS/GNP
TOTAL NET PRIVATE TRANSFERS/GNP
VOLUNTARY ACCESS
PROBLEM DEBTORS

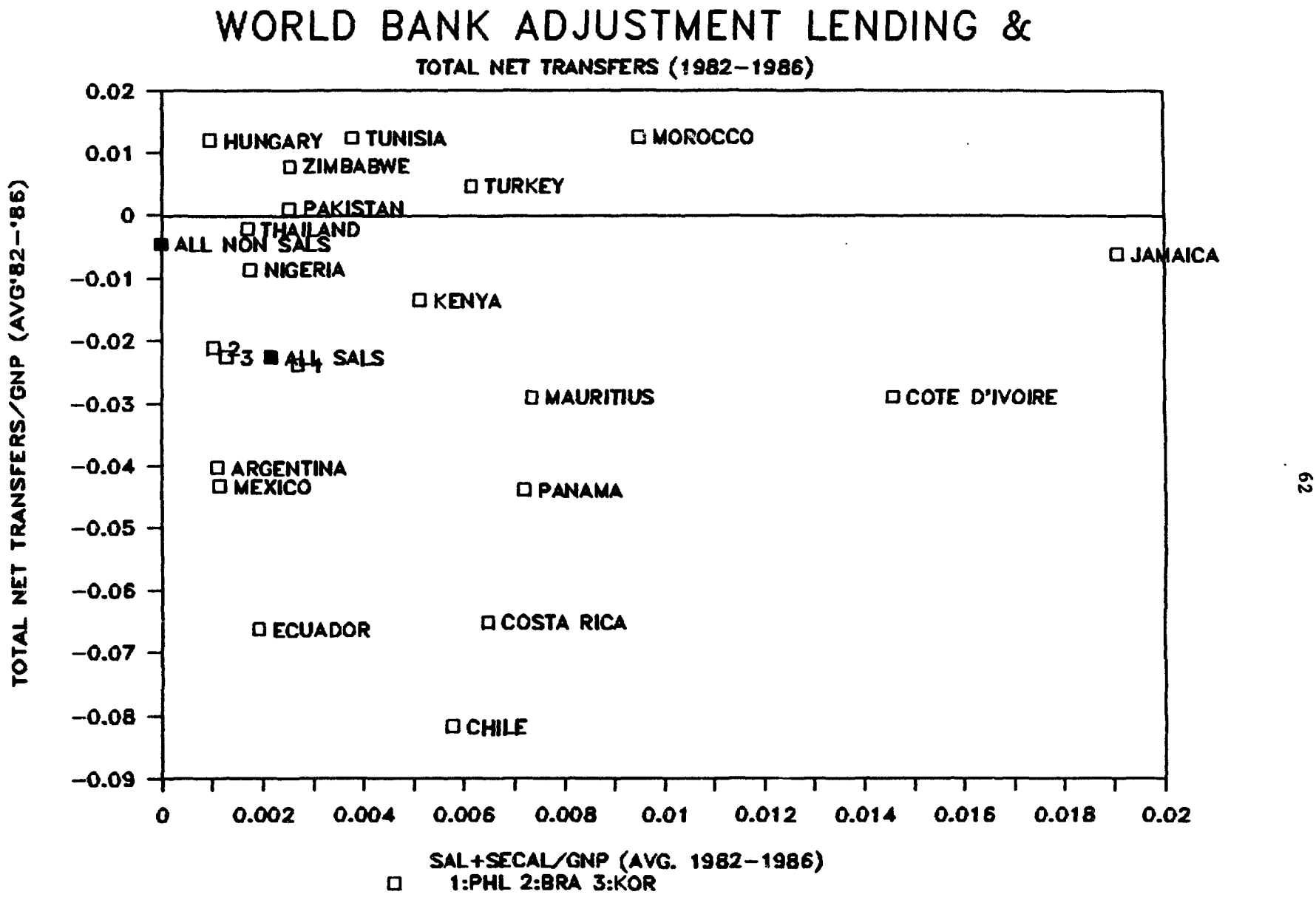
FIGURE 3

CREDIT CONTSTRAINED COUNTRIES:



Correlation Coefficient: -.12 (-.34 excluding Brazil and Mexico)
Statistically Significant at 5% Level

FIGURE 4a

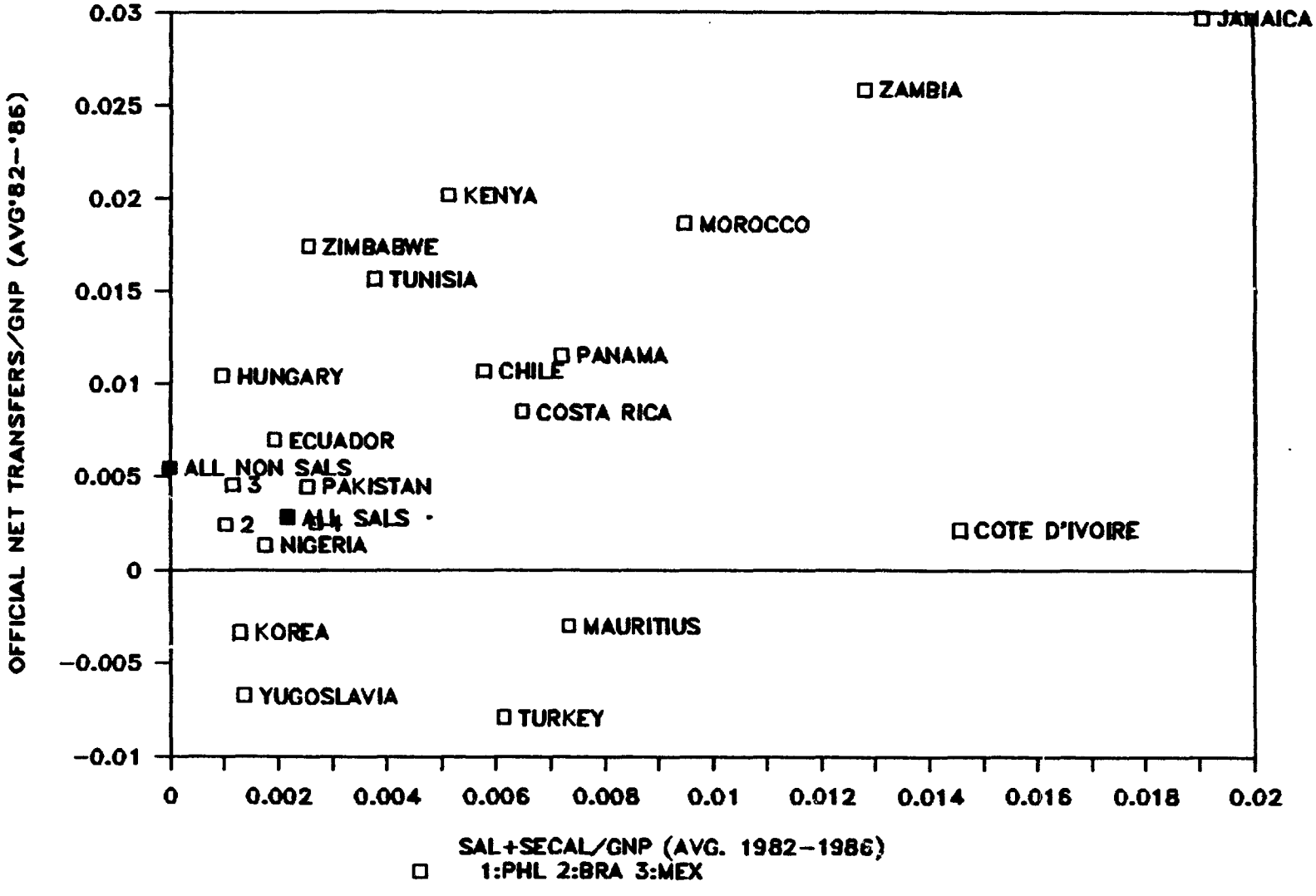


Correlation Coefficient: -.01 (.24 including Mauritania and Zambia - not shown)

FIGURE 4b

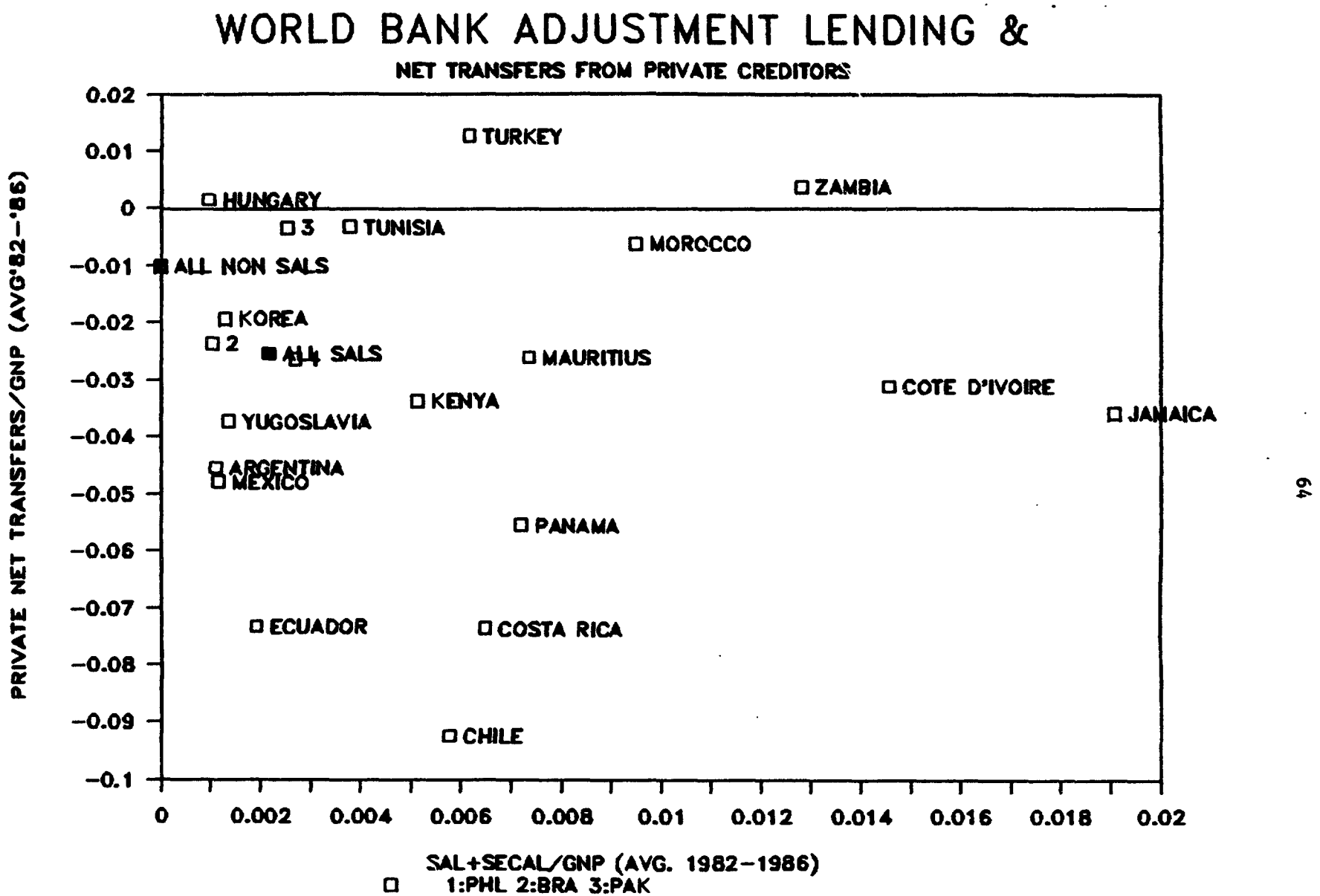
WORLD BANK ADJUSTMENT LENDING &

NET TRANSFERS FROM OFFICIAL CREDITORS



Correlation Coefficient: .44
Statistically Significant at 5% Level

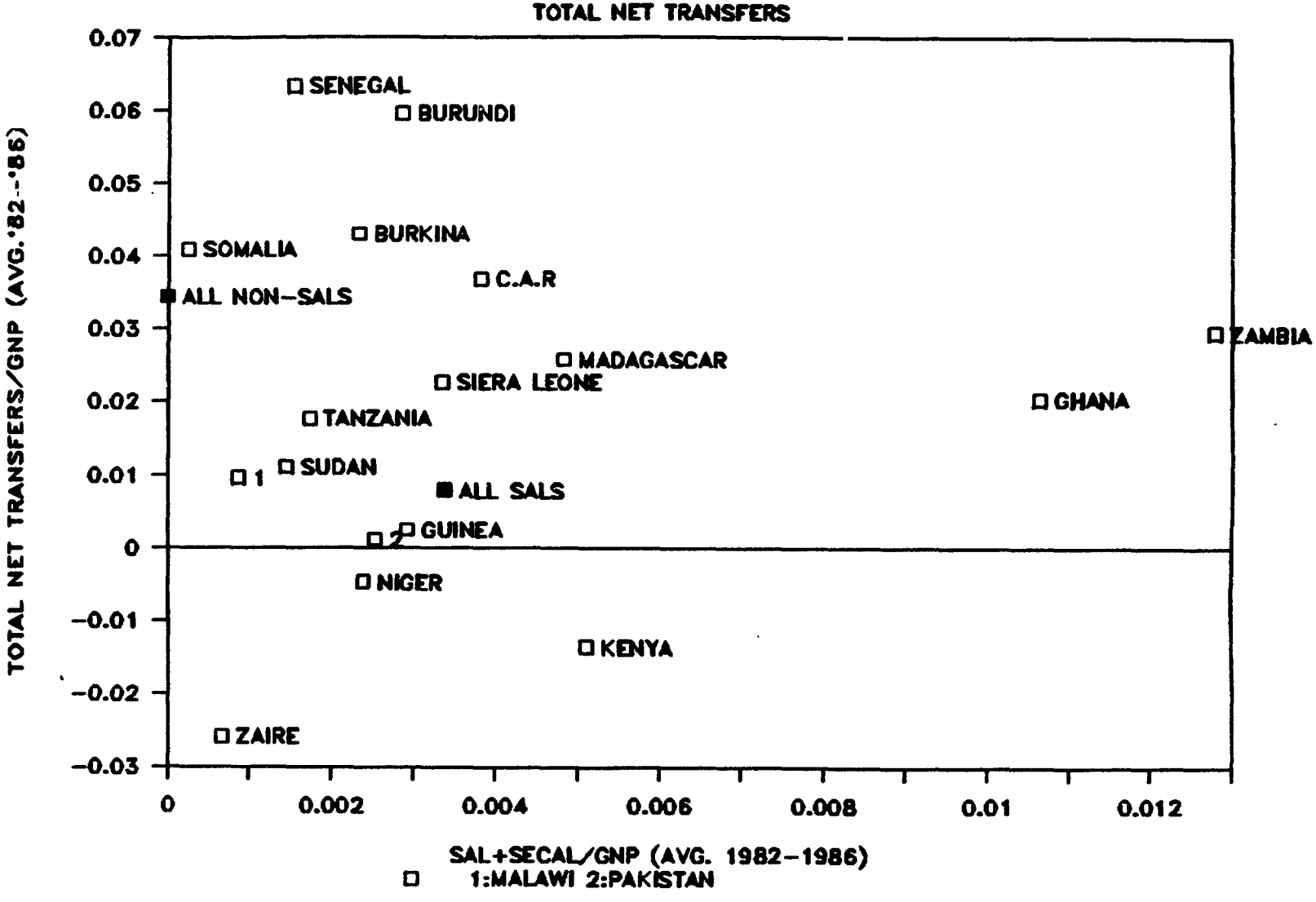
FIGURE 4c



Correlation Coefficient: -.15

FIGURE 4d

IDA ADJUSTMENT LENDING TO THE LICs &

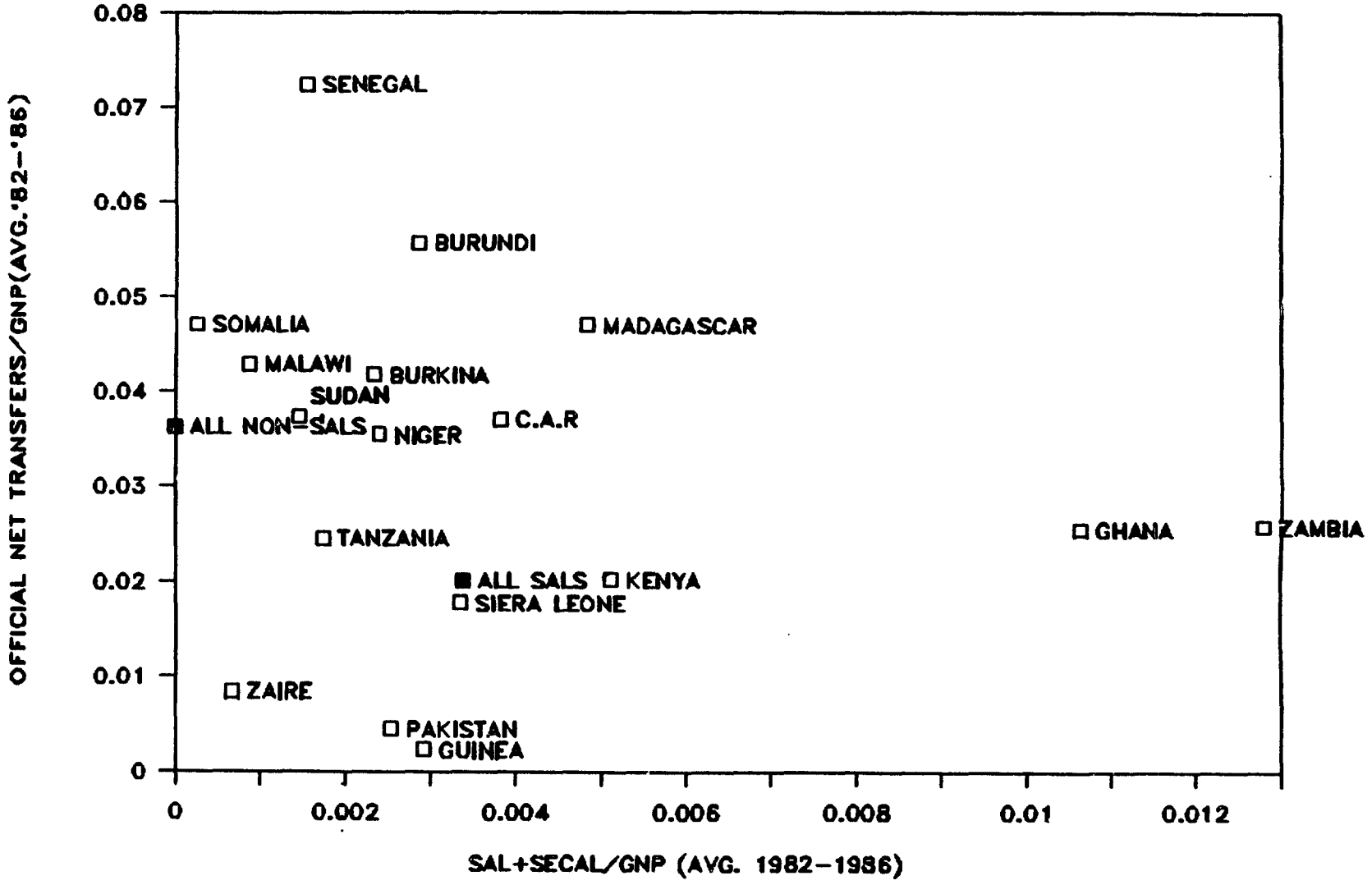


Correlation Coefficient: .02

FIGURE 4e

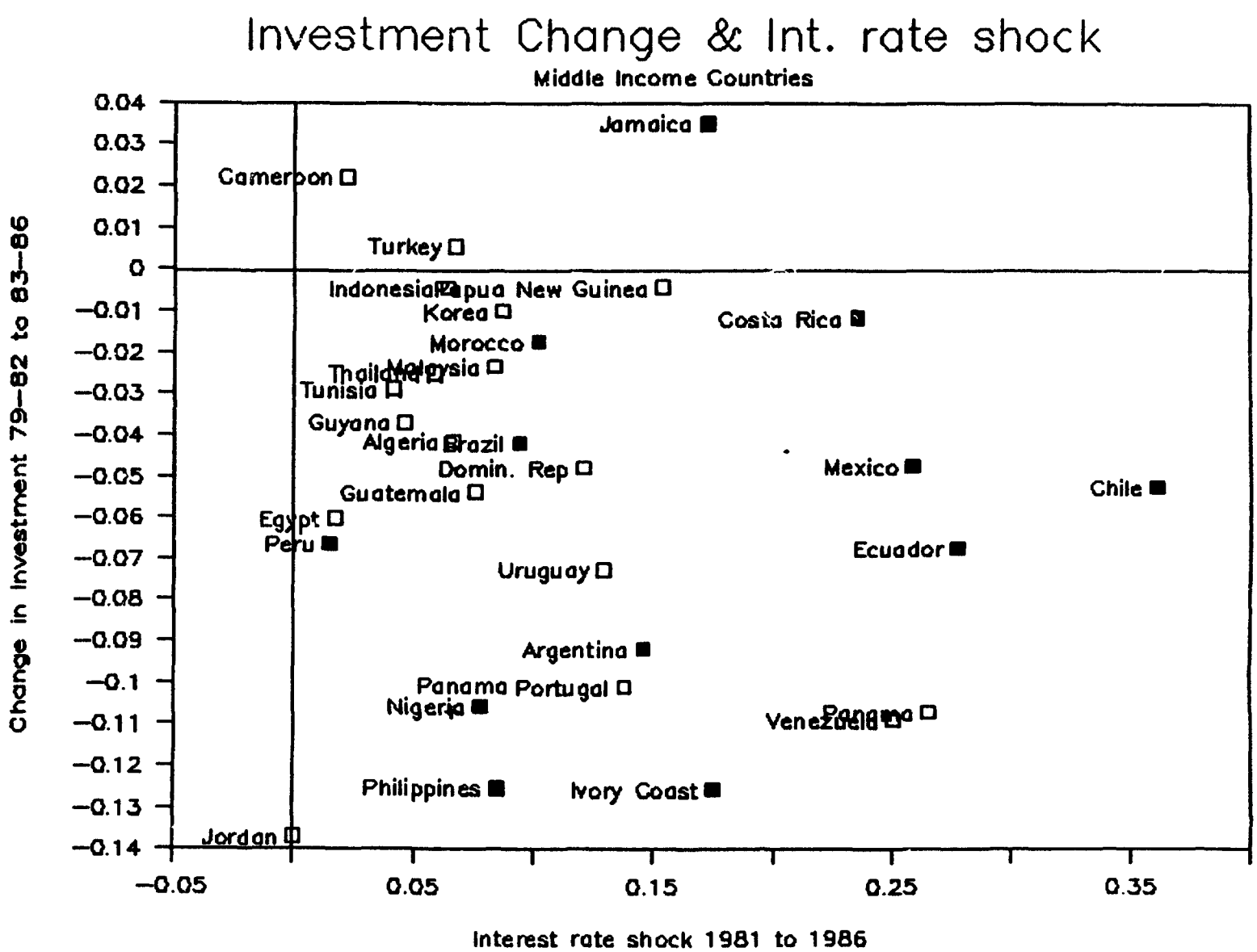
IDA ADJUSTMENT LENDING TO THE LICs &

NET TRANSFERS FROM OFFICIAL CREDITORS



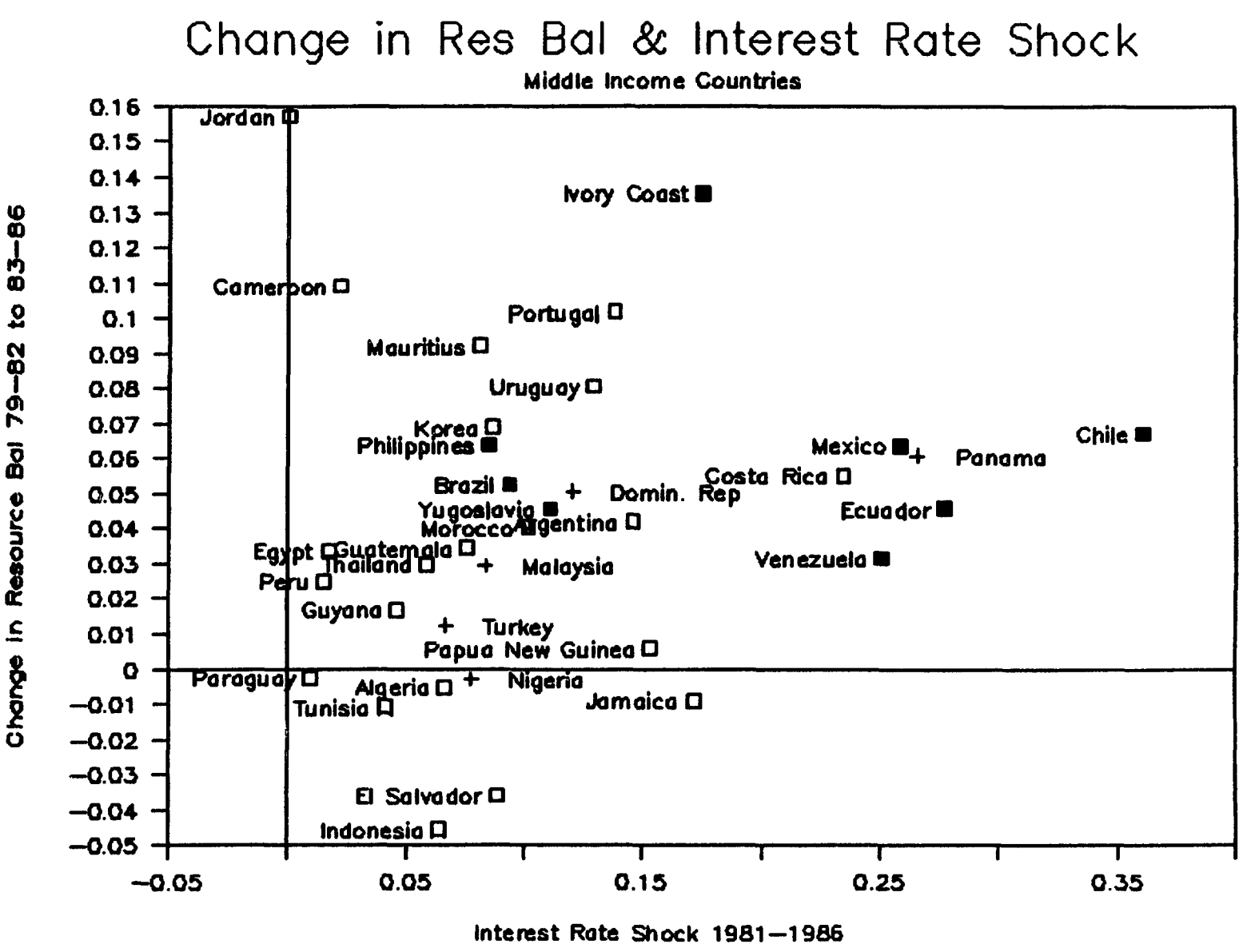
Correlation Coefficient: .05 (-.18 including Togo and Guinea Bisseau - not shown)

FIGURE 5a



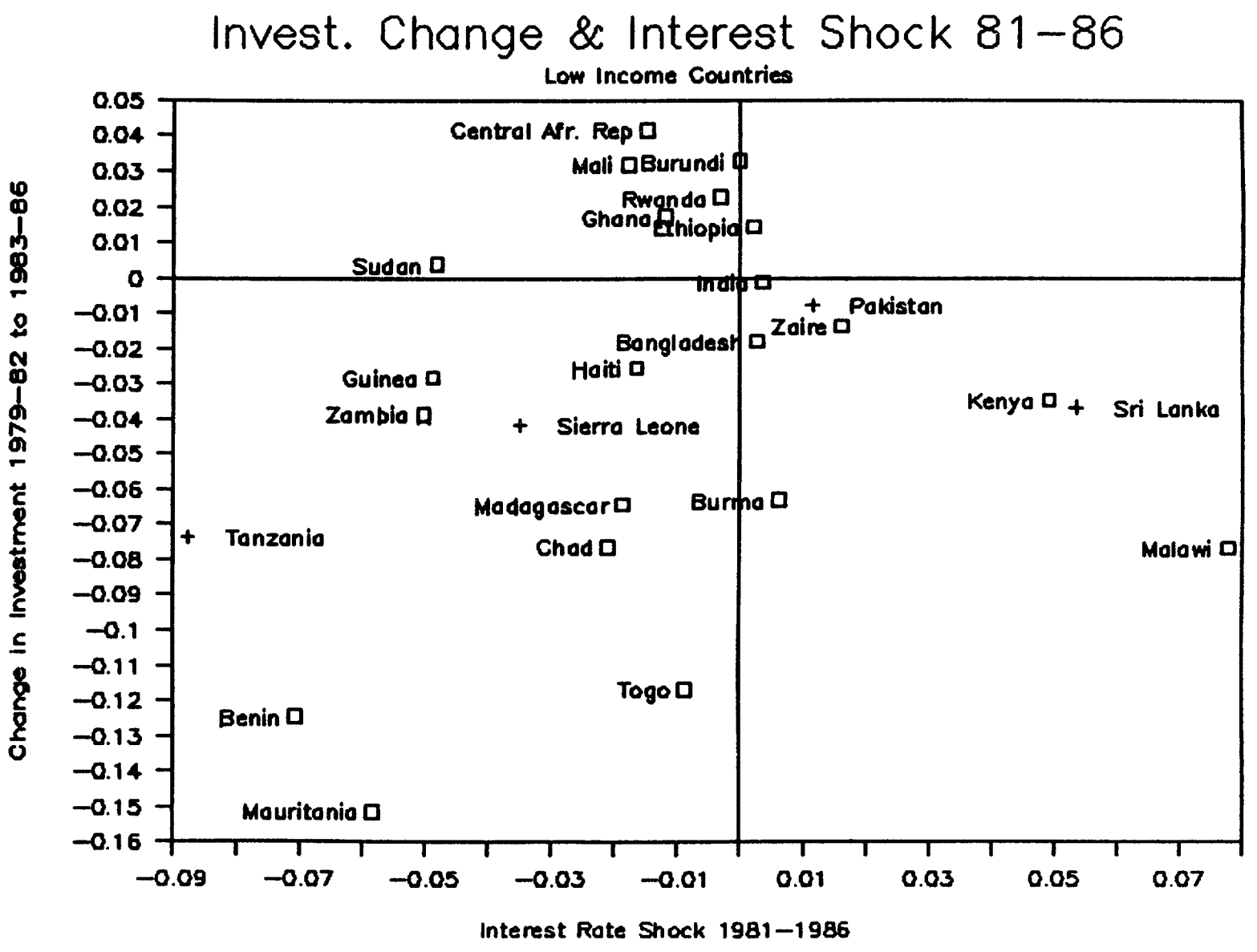
Correlation Coefficient: -.10

FIGURE 5b



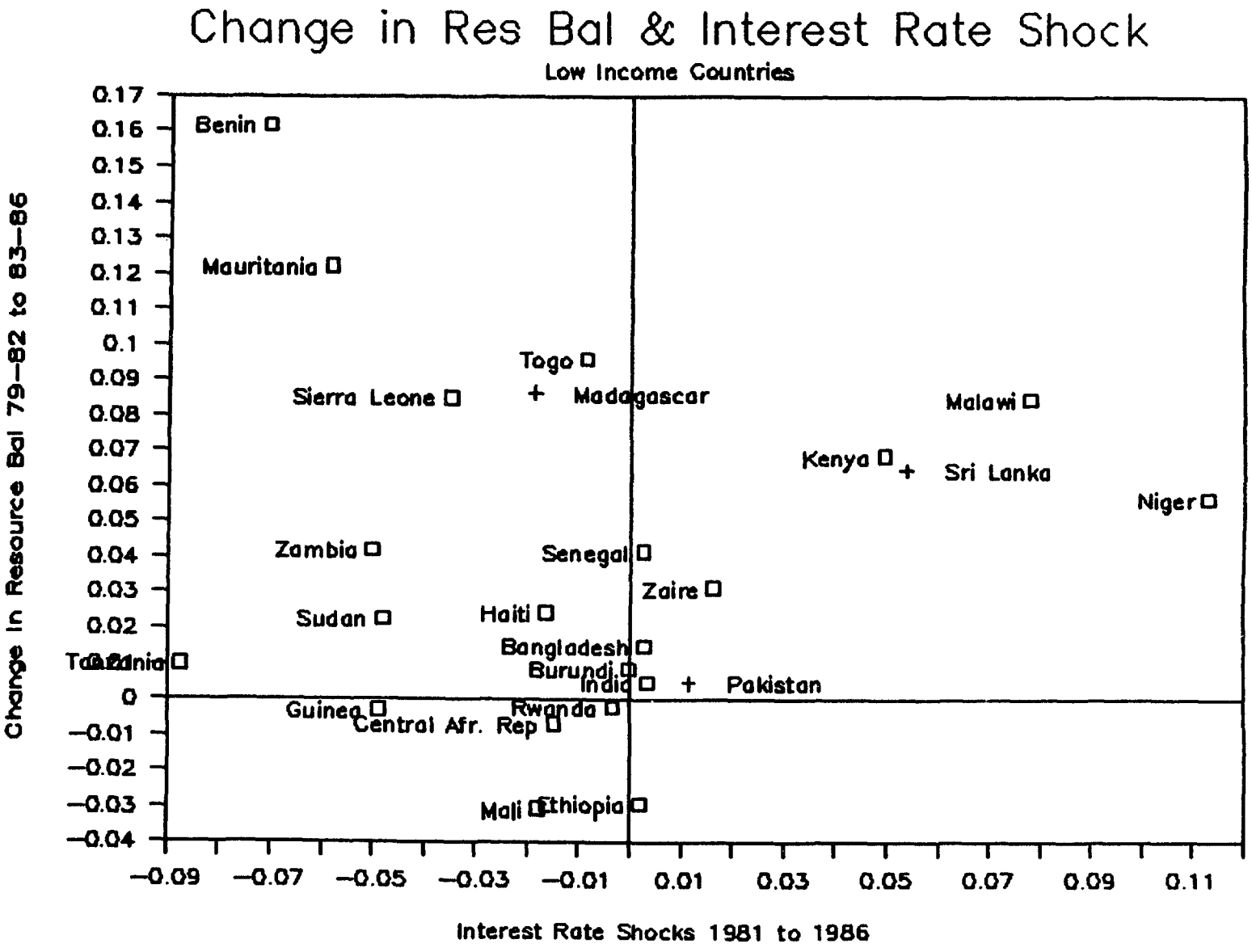
Correlation Coefficient: .14

FIGURE 5c



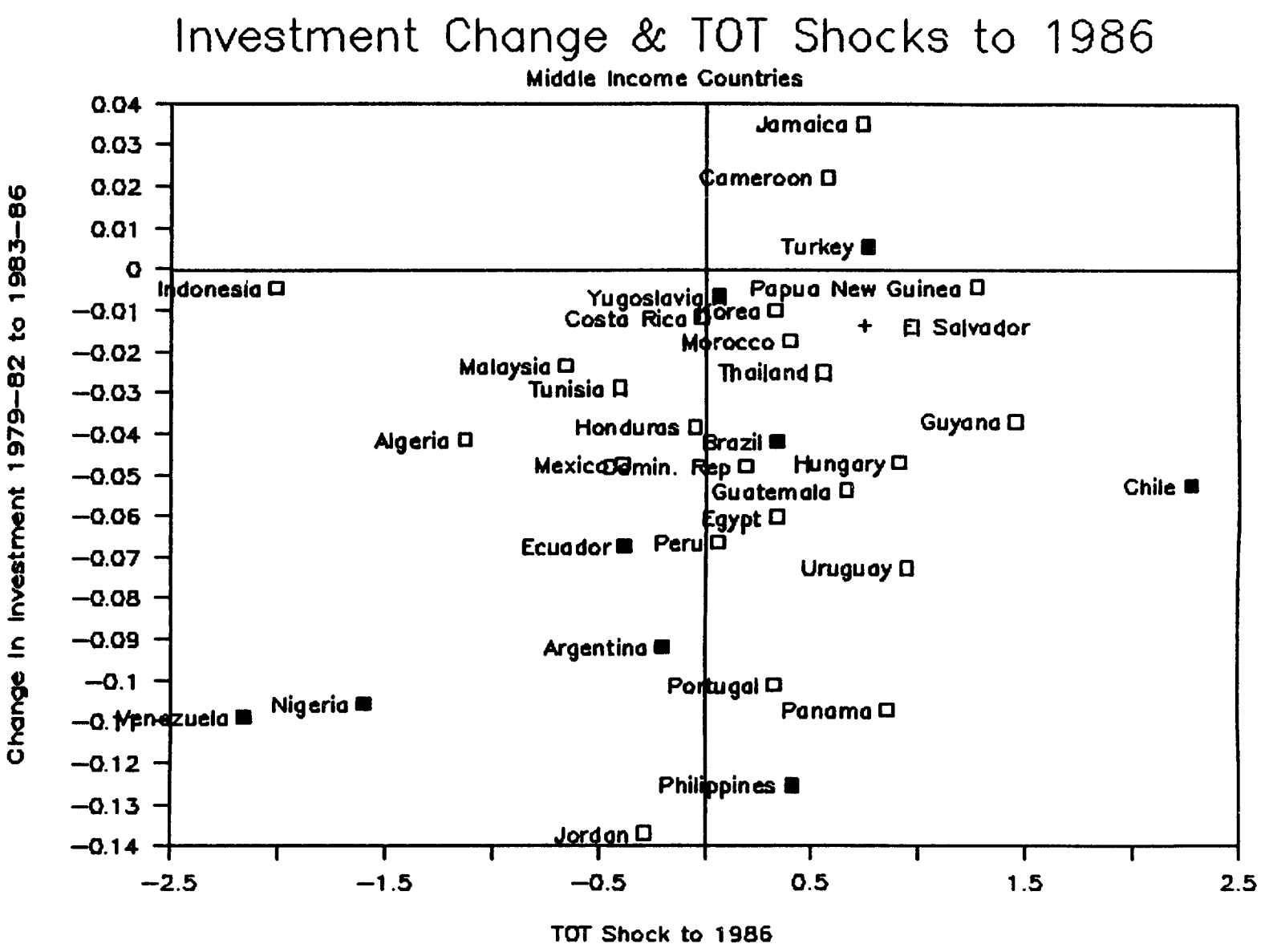
Correlation Coefficient: -.16

FIGURE 5d



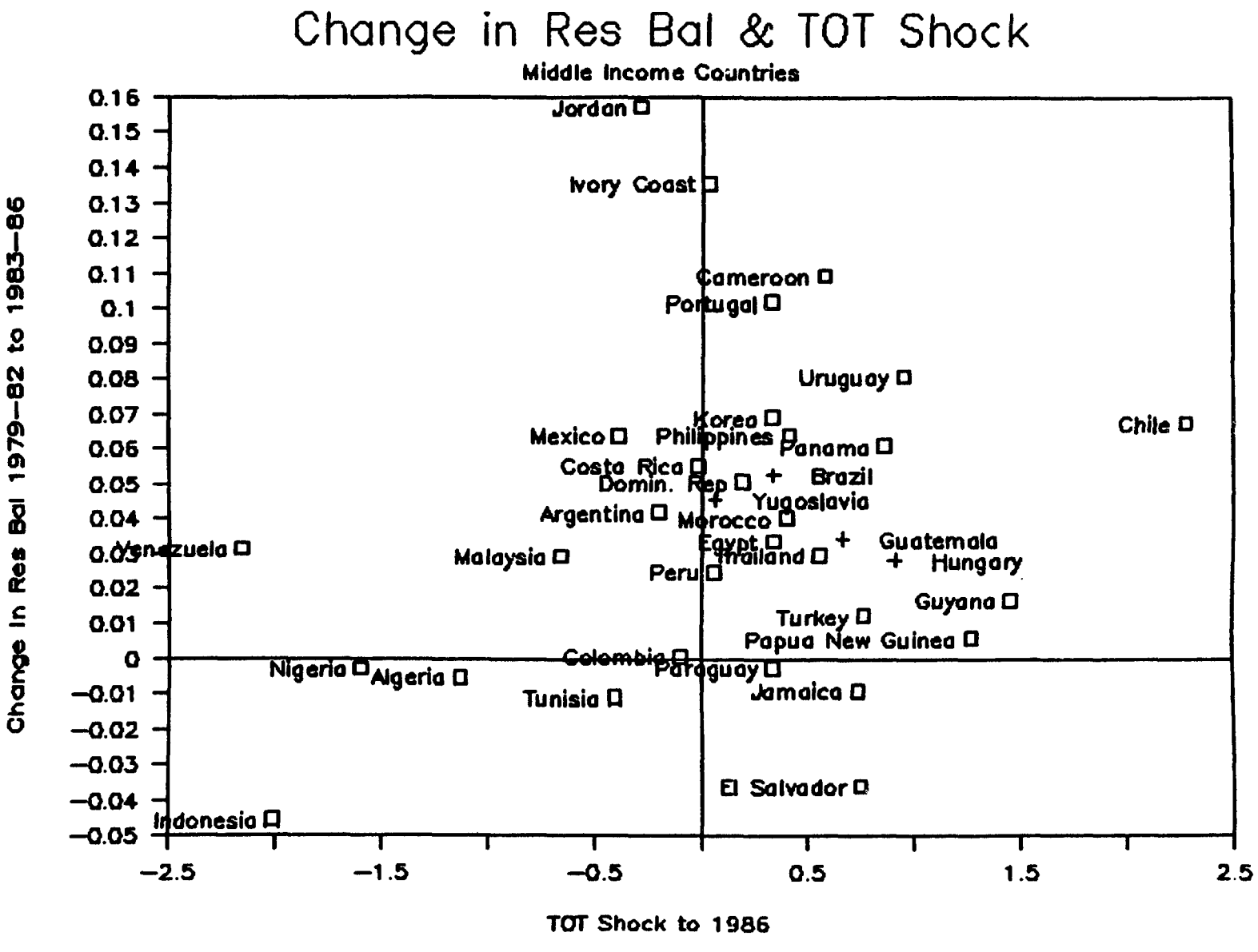
Correlation Coefficient: .22

FIGURE 6a



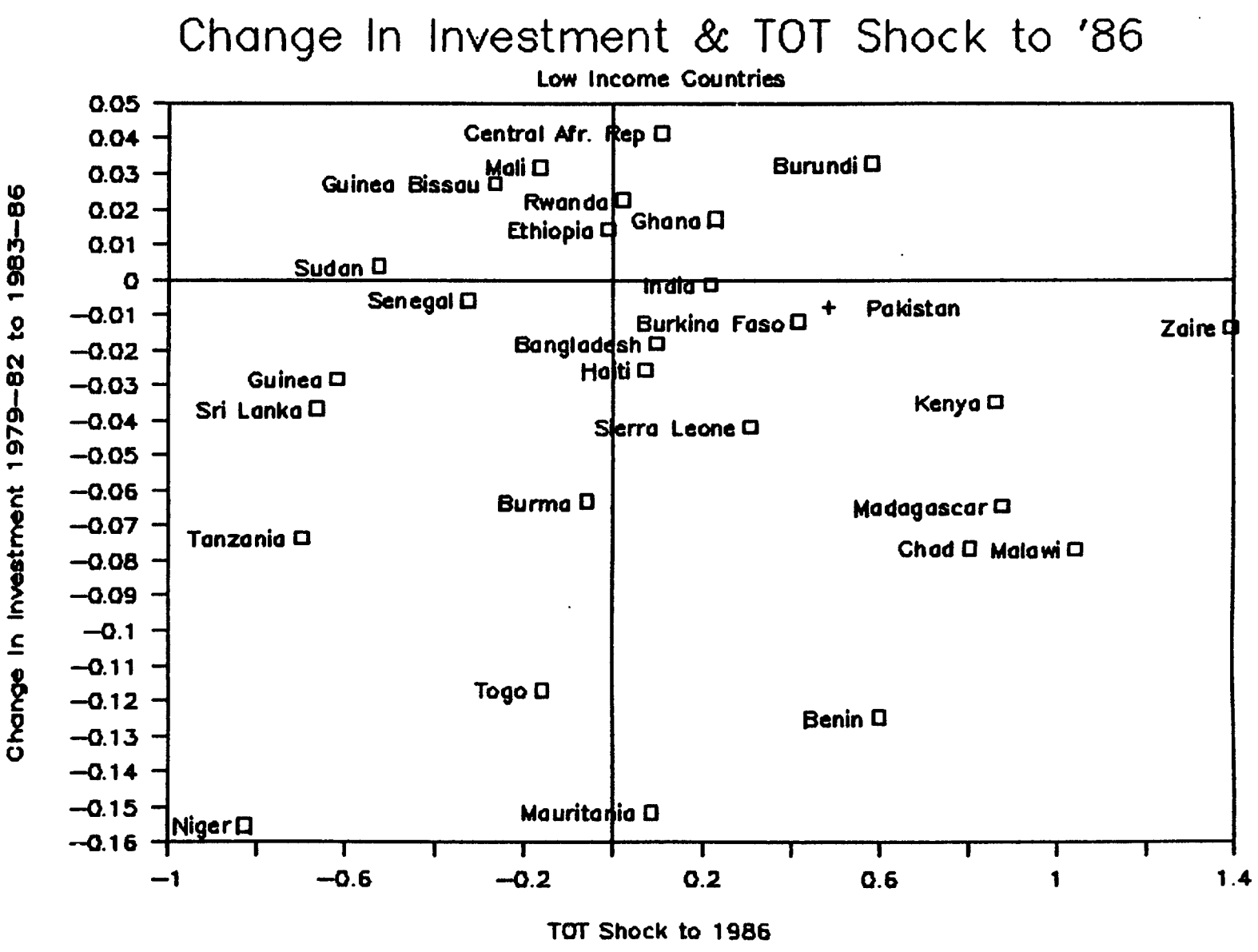
Correlation Coefficient: .20

FIGURE 6b



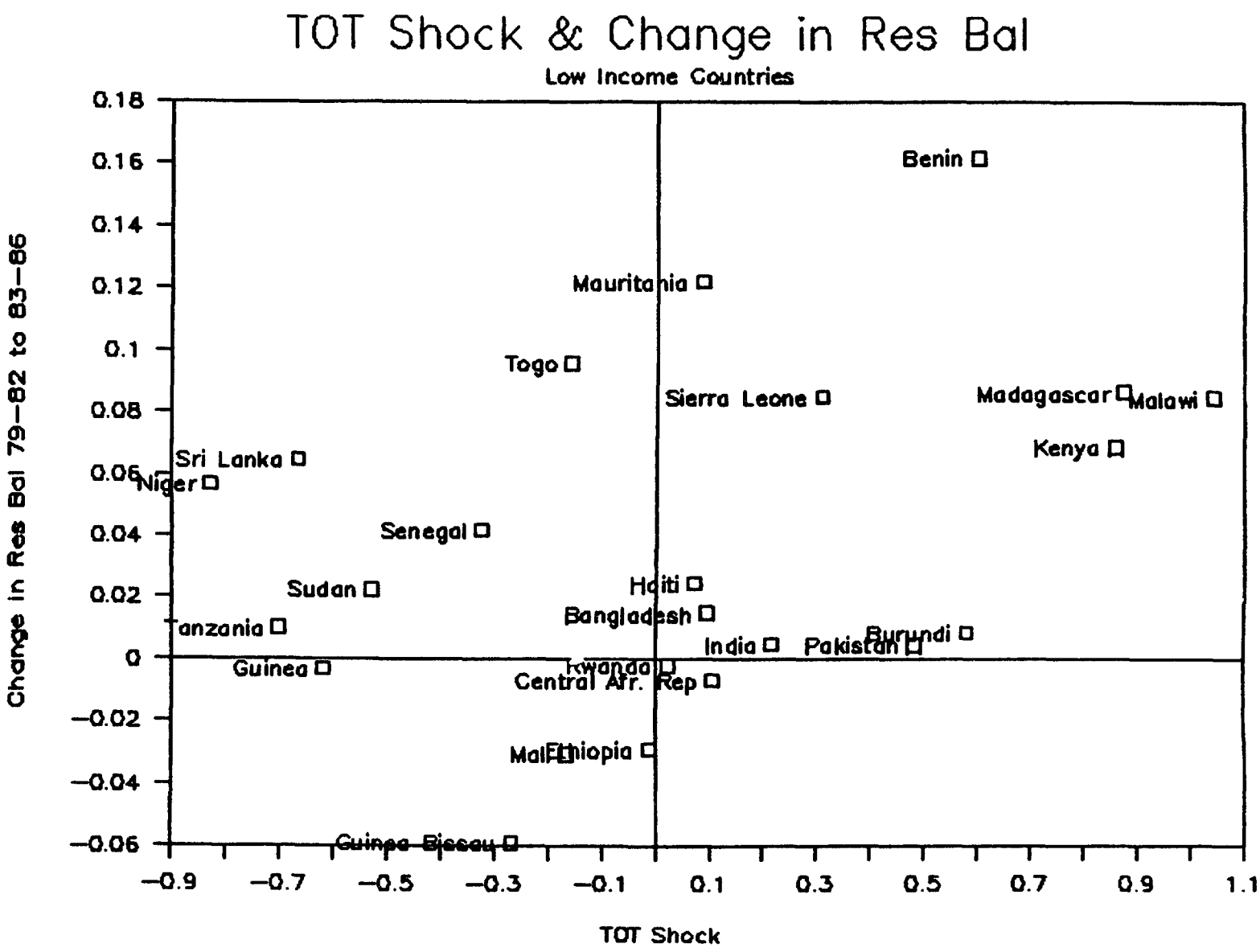
Correlation Coefficient: .21

FIGURE 6c



Correlation Coefficient: 0.00

FIGURE 6d



Correlation Coefficient: .15

APPENDIX I
Classification of 70 RALI Countries

30 Sub-Saharan Africa	20 Latin America & Caribbean	10 Asia 2/	10 EMENA	17 Highly Indebted Countries	31 Low-Income Countries 1/	39 Middle-Income Countries
Benin	Argentina	Bangladesh	Algeria	Argentina	Bangladesh	Algeria
Burkina Faso	Bolivia	Burma	Egypt	Bolivia	Benin	Argentina
Burundi	Brazil	Indonesia	Hungary	Brazil	Burkina Faso	Bolivia
Cameroon	Chile	Korea	Jordan	Chile	Burma	Brazil
Central Afr Rep	Colombia	Malaysia	Morocco	Colombia	Burundi	Cameroon
Chad	Costa Rica	Nepal	Pakistan	Costa Rica	Central Afr Rep	Chile
Cote D'Ivoire	Dominican Rep	Papua New Guinea	Portugal	Cote D' Ivoire	Chad	Colombia
Ethiopia	Ecuador	Philippines	Tunisia	Ecuador	Ethiopia	Costa Rica
Ghana	El Salvador	Sri Lanka	Turkey	Jamaica	Ghana	Cote D'Ivoire
Guinea	Guatemala	Thailand	Yugoslavia	Mexico	Guinea	Dominican Rep
Guinea-Bissau	Guyana			Morocco	Guinea-Bissau	Ecuador
Kenya	Haiti			Nigeria	Haiti	Egypt
Madagascar	Honduras			Peru	Kenya	El Salvador
Malawi	Jamaica			Philippines	Madagascar	Guatemala
Mali	Mexico			Uruguay	Malawi	Guyana
Mauritania	Panama			Venezuela	Mali	Honduras
Mauritius	Paraguay			Yugoslavia	Mauritania	Hungary
Niger	Peru				Nepal	Indonesia
Nigeria	Uruguay				Niger	Jamaica
Rwanda	Venezuela				Pakistan	Jordan
Senegal					Rwanda	Korea
Sierra Leone					Senegal	Malaysia
Somalia					Sierra Leone	Mauritius
Sudan					Somalia	Mexico
Tanzania					Sri Lanka	Morocco
Togo					Sudan	Nigeria
Uganda					Tanzania	Panama
Zaire					Togo	Papua New Guinea
Zambia					Uganda	Paraguay
Ziababwe					Zaire	Peru
					Zambia	Philippines
						Portugal
						Thailand
						Tunisia
						Turkey
						Uruguay
						Venezuela
						Yugoslavia
						Ziababwe

Notes:

1/ GNP Per Capita at 1985 is below $450.
Data for Bolivia, Nepal, Uganda, Ziababwe: incomplete or not available.

2/ Asia Excludes India and China

APPENDIX I (Cont'd)

8 Oil Exporting Countries	49 Nonoil, Nonmanufacturing Countries (Primary)		24 Countries with Voluntary Access	16 Problem Debtors (Credit Constrained (Countries)	48 Adjustment Lending (SAL & SECAL) Countries	22 Non SAL Countries
Algeria	Argentina	Madagascar	Algeria	Argentina	Argentina	Algeria
Cameroon	Bangladesh	Malawi	Cameroon	Bolivia	Bangladesh	Benin
Ecuador	Benin	Malaysia	Colombia	Brazil	Bolivia	Burma
Egypt	Bolivia	Mali	Dominican Rep	Chile	Brazil	Cameroon
Indonesia	Burkina Faso	Mauritania	Egypt	Costa Rica	Burkina Faso	Chad
Mexico	Burma	Mauritius	El Salvador	Cote D' Ivoire	Burundi	Dominican R
Nigeria	Burundi	Nepal	Guatemala	Ecuador	Central African Rep.	Egypt
Venezuela	Central Afr Rep	Niger	Guyana	Jamaica	Chile	El Salvador
	Chad	Panama	Honduras	Mexico	Colombia	Ethiopia
	Chile	Papua New Guinea	Hungary	Morocco	Costa Rica	Guatemala
	Colombia	Paraguay	Indonesia	Nigeria	Cote D'Ivoire	Haiti
	Costa Rica	Peru	Jordan	Peru	Ecuador	Honduras
	Cote d'Ivoire	Rwanda	Korea	Philippines	Ghana	Jordan
	Dominican Rep	Senegal	Malaysia	Uruguay	Guinea	Malaysia
	El Salvador	Sierra Leone	Mauritius	Venezuela	Guinea-Bissau	Mali
	Ethiopia	Somalia	Morocco	Yugoslavia	Guyana	Papua N Guinea
	Ghana	Sri Lanka	Panama		Hungary	Paraguay
	Guatemala	Sudan	Papua New Guinea		Indonesia	Peru
	Guinea	Tanzania	Paraguay		Jamaica	Portugal
	Guinea-Bissau	Togo	Portugal		Kenya	Rwanda
	Guyana	Uganda	Thailand		Korea	Sri Lanka
	Haiti	Zaire	Tunisia		Madagascar	Venezuela
	Honduras	Zambia	Turkey		Malawi	
	Jamaica	Zimbabwe	Zimbabwe		Mauritania	
	Kenya				Mauritius	
					Mexico	
					Morocco	
					Nepal	
					Niger	
					Nigeria	
					Pakistan	
					Panama	
					Philippines	
					Senegal	
					Sierra Leone	
					Somalia	
					Sudan	
					Tanzania	
					Thailand	
					Togo	
					Tunisia	
					Turkey	
					Uganda	
					Uruguay	
					Yugoslavia	
					Zaire	
					Zambia	
					Zimbabwe	

3 Manufactured Exporting Countries 3/
Brazil
Hungary
Jordan
Korea
Morocco
Pakistan
Philippines
Portugal
Thailand
Tunisia
Turkey
Uruguay
Yugoslavia

Notes:

3/ 1985 Manufacturing exports as % of total exports exceeds 35%

Data for Bolivia, Nepal, Uganda, Zimbabwe: incomplete or not available.

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